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What is the American Standard of Living?[1]

By ROYAL MEEKER, UNITED STATES COMMISSIONER OF LABOR STATISTICS.

REFERENCE is constantly made, in the press and in public utterances, to the American standard of living, as though it were a standard as definite and well known as the foot, the pound, or the peck measure. The writers and speakers take it for granted that everybody knows what the much-quoted American standard of living is, although they do not specify what is included in it, and when asked for particulars they become vague and oratorical. It gets us no farther toward an answer to be told that the American workingman is the best fed, best clothed, best housed, and most contented workman in the world. We may accept without argument the statement that, occupation for occupation, the American workman receives higher money compensation than do European workers, and that his higher money wages actually enable him to purchase more of the necessaries of life than are obtainable by the European workers for their wages.

We must have more exact information in order to determine what the American standard of living means. The investigations into cost of living made prior to 1915 do not help us much. The classic cost of living study made by the United States Bureau of Labor in 1901 and published in 1903 as the Eighteenth Annual Report of the Commissioner of Labor, helps us but little toward the desired goal. Except in the case of food, all that this study brings out is the *cost* of living, not the *standard* of living. Even for food this 1901 study does not give us exact enough information as to the quantities and kinds of food to enable us to determine whether the families studied were sufficiently nourished. The study made by Dr. Chapin is too limited in scope to give us the American standard of living. It is also questionable if the families studied were truly representative American families.

The generalizations made in this paper are based on the results, so far as they have been analyzed, of the country-wide cost of living study which the Bureau of Labor Statistics conducted during 1918

[1] An address delivered June 7, 1919, before the Forty-sixth Annual National Conference of Social Work, held at Atlantic City, N. J.

and 1919. The figures given are merely first estimates and are subject to revision. The study was planned for the purposes (1) of determining the quantities and cost of all important items of family consumption in all the more important industrial centers in the United States, (2) of applying the accepted dietary standards for determining whether the families studied were obtaining a sufficient number of calories and sufficient variety in their diets to maintain their members in health, (3) of working out, if possible, standards—similar to the recognized dietary standards—for clothing, housing, fuel, house furnishings, education, amusement, medical care, insurance and perhaps some other items which have been heretofore blanketed and lost under the term "miscellaneous," (4) of formulating eventually tentative standard budgets to be used by wage adjustment boards in determining minimum and fair wage awards, (5) of enabling the Bureau of Labor Statistics to compute a cost of living index number that will show variations in total family expenses in the same way as the retail food price index shows variations in the cost of the family food budget.

It is evident at once that the study as outlined by me, with the assistance of domestic science and cost of living experts, presents enormous difficulties. One should not, however, refrain from attempting an undertaking merely because it is difficult. Everything that is worth doing is difficult. The first great task was to find out what workingmen's families buy, how much they expend, and how much of each article bought they get for the money paid out. It is in many respects unfortunate that the study had to be made during 1918-19 when prices were abnormal, resulting in abnormalities in expenditure, and when such stress had to be laid upon the necessity of investing in Liberty bonds. The distribution of expenditures over the items of the family budget were greatly disturbed by the rapid changes in prices and wages. The loan campaigns resulted in inducing workmen to curtail expenses for clothing, house furnishings, amusements, and perhaps even fuel, housing and food itself, in order to invest in bonds. The result was unusuallylarge savings reported and abnormally low expenditures for other items where curtailment was possible. Many families not only economized on clothes and house furnishings but actually skimped themselves on food, both because of the high prices and because of the intense Liberty loan drives.

More than 300 agents were employed by the Bureau of Labor Statistics to secure from housewives statements of their expenditure for an entire year. The information thus secured for the entire year by personal interview was checked in many instances by daily expense accounts, which many housewives were prevailed upon to keep over a period of not less than five weeks. These daily expense

accounts are especially useful in checking up expenditures for food and other articles bought daily or weekly and easily forgotten.

Nearly 13,000 family schedules were obtained in 71 large cities and 26 small cities and towns in the different geographical sections of the country for incomes ranging from less than $900 to more than $2,500 per family. These family schedules are now being tabulated. It can not be said yet whether or not all of the objects for which the cost of living study was undertaken will be attained. The actual expenses for the different items of consumption are now being tabulated by income groups. Not only do we have the cost but we have the quantity, in most instances, of all important items of the family budget. The quantity bought is absolutely essential for working out standard budgets. Expenditures stated merely in sums of money are useless for the determination of the standard of living or of the quantitative change in the cost of this standard of living.

Food.

Quantitative standards to measure the sufficiency of the family food budget have been worked out tentatively in dietary studies. We do not eat or wear or burn dollars and cents. If the price of beef goes up we can eat less beef and more of some other protein-rich food, and perhaps keep our money expense for food constant, but if the price of all food increases 100 per cent we can not cut down our consumption of all food one-half so as to keep our food budget expense unchanged. To speak with scientific accuracy man does not live by loaves of bread, pounds of meat, pecks of potatoes, quarts of milk, etc. He lives by the energy stored in food, which energy is measured in heat units called calories. Even this does not tell the whole story of food because it makes a difference from what source we derive our calories. There must be a proper balance between proteins, fats, starches, sugars, cellulose, fruit acids, and mineral salts. The last three classes of foods furnish us no calories at all, but they are just as essential to a healthful diet as are the fats, sugars, and starches which furnish a large quantity of calories. By far the best single measure of the sufficiency of a diet is, however, the calorie. Unless the average active worker consumes and assimilates from 3,000 to 3,500 calories per day he will inevitably either lose weight or efficiency as a worker or both, and this regardless of the number of dollars he spends for food, or even the number of pounds of bread, beans, and beef he eats. Unfortunately bread, beef, pork, and even eggs and potatoes, vary considerably in the calorie content per pound. It would be a great step forward if while we are reforming weights and measures we should require by law that the prices of all foodstuffs must be expressed in terms of

calories, just as in Great Britain and to some extent in this country coal is sold, not by the ton, but by the British thermal unit. If it is possible to calculate the calorie content of the food for our furnaces it is surely possible to do so for the food for our stomachs. It is, of course, highly desirable to eliminate from the diet of our steam boilers and engines as much slate, ash, and bowlders as possible; it would seem even more desirable to eliminate from the diet of human beings the things that are sold as bread but are not bread, the bone that is sold for beef, and the gristle that is called pork chops by the butcher. There are no insuperable obstacles in the way of selling bread, beef, pork, eggs, milk, cabbage, onions, corn, sugar, etc., by the 100 or 1,000 calories. It should be done and it can be done.

By the time people become educated to the point where they recognize that the important thing in regard to food is not its price per pound or quart, that often the cheapest food per pound is the most expensive per unit of nourishment, they will no doubt have learned also that man can not live by bread alone or even by calories alone. Fruits and vegetables must be used largely in a proper diet, even though their calorie content is low. A proper balance between proteins, fats, starches, sugars, cellulose tissue, minerals, and acids is necessary for the maintenance of health.

Some considerable change in diet is shown since the 1901 study was made. This, of course, was to be expected in view of the greatly increased prices. The present study reveals, however, that the American family does not suffer from overfeeding, as has been so frequently alleged. On the contrary, in most of the communities studied the food purchased represents less than 3,500 calories per equivalent adult male. It is necessary to buy about 3,500 calories in order to secure 3,000 calories per adult male, which is considered to be the amount required by moderately active workers.

Granted that to maintain the average adult worker in health and efficiency it requires approximately 3,000 calories of food energy consumed, which amount can be obtained from about 3,500 calories of food energy purchased at the stores, how are we to use this knowledge to determine the adequacy of the food budget of a family consisting of husband, wife, and five children of 16, 13, 10, 5, and 2 years? In order to measure the food requirements of a family we must have a consumption yardstick to measure the number of calories needed by each member of the family. Experiments have demonstrated that food consumption of adults varies approximately with the weight of the consumer. Women, on the average, are about 90 per cent as heavy as men, and therefore a woman is rated in food consumption as equal to 90 per cent of a man. Children of different ages are rated in food consumption as follows in terms of an adult man:

	Per cent.
Ages above 14 years	100
11 to 14 years	90
7 to 10 years	75
4 to 6 years	40
3 years and under	15

These equivalents are quite rough but enable us to express the food consumption of families of varying composition in terms of a common unit of measure, namely, the equivalent adult man.

The food requirements of the family above mentioned would be, according to this scale, equal to that of 5.1 adult men. Allowing 3,500 calories of food purchased per man, this family should use food furnishing not less than 17,850 calories each day of the year. These standards of measurement are but approximate, it is true, and we are dealing with averages. There are very considerable individual deviations from the average. The average man does not exist, but the world is full of living, breathing men who look, act, and eat so much like the hypothetical average man that it requires an expert with microscope, measuring tape, and scales to tell the difference.

The family food budgets are now being analyzed. We can say with confidence that it requires to-day an expenditure of from 50 to 60 cents per man per day for food to secure a well-balanced diet sufficient in the number of calories and in variety. This means that American families consisting of husband, wife, and three children below the age of 15 years, living in large and medium-sized cities must spend about $610 per annum for food to keep themselves properly nourished for health and efficiency. This expenditure for food goes with incomes of from $1,800 to $1,850, so we may say that American families on the average are not fully nourished until their yearly income reaches $1,800. These figures do not indicate that our people are to-day suffering from eating too much meat, or even too much of other foods not so expensive. The average income and the modal income both fall well below $1,600. The mode is about $1,350 and the average not greatly higher. Conclusions must not be too hastily drawn from these figures. They do not mean that our working population is dying of slow starvation; nothing of the sort. But they do indicate that the workers of America are obliged to live on a diet too restricted and monotonous for the maintenance of as high a degree of efficiency and health as ought to be maintained as a reasonable minimum. I am of the opinion that the most efficacious remedy is not higher wages, but rather improved systems for distributing and marketing foodstuffs and the education of housekeepers in the art of keeping house, with emphasis on diets. Housekeeping is not exactly a lost art. It is one of the arts that has not yet been completely found.

Clothing.

No standard has yet been devised for measuring the adequacy of expenditure for articles other than food. The adequacy of clothing, for instance, can not be measured in pounds, calories, or square yards. It is interesting to note that actual expenditure for clothing, in all income groups combined, for wives and children of different ages conforms quite closely to the scale for food consumption. Unfortunately we have no unit of measure with which to determine whether the clothing bought is adequate or not. The charge so frequently made that the American workingman is extravagant in expenditures for clothing for himself and his family seems hardly borne out by the facts reported. Expenditures for clothing per adult male during the high-price year 1918 ranged from a minimum of $30 in the lowest income group to about $180 in the highest income group. The average clothing expenditure per adult male in the modal income group of $1,350 is probably not more than $90. This does not seem to give much room for extravagance in clothing at the existing prices. Probably this sum is sufficient to enable the prudent and economical housewife to keep her family clothed warmly enough, but it does not leave much margin for style. Clothes were first invented, not for protection against heat, cold and wet, but for adornment, and it is for the purpose of ornamentation largely that clothes are worn to-day. The bizarre notions of beauty possessed by the designers of clothing are incomprehensible to ordinary mortals, but as long as society accepts these ridiculous and often health-impairing standards of dress, society must stand ready to provide the worker with a wage sufficient to enable him to conform to the accepted fashion. It is repugnant to our sense of right that the working classes should dress in a way to set them apart from the more well-to-do. Few men and women among the workers in this country are willing to appear in public unless they can dress near enough to the mode or the standard of fashion so as not to attract critical attention. It is very clear then that the clothing of the worker's family should not consist merely of material to protect them from the icy blasts of winter, the blazing rays of the sun, and the dews and deluges of heaven, but should possess something of that subtle something called "style." Style is expensive. Also, there is no standard of style. There are not even standards of dress fabrics. However, we do not need exact standards to know that $90 per adult male per annum is not too much for clothes in the varied climate of the United States.

It is interesting to note that wives spend less for clothes than husbands until we reach the higher incomes, about $1,800 per year. It is also of interest that when economies are necessary they are made largely at the expense of the wife's wardrobe. The first baby makes

a cut in the mother's clothes money and every addition to the family cuts deeper into this item. It is scarcely fair to say that American wives prefer clothes and upholstered parlor furniture to children. It costs money, pain, and sacrifice to bear and rear children, however, and the Bureau of Labor Statistics' study shows with startling vividness the extent to which the mother is obliged to sacrifice her house and her personal adornment to her children.

Housing.

According to the British official census overcrowding begins when there are two or more persons per room. Even if we accept a socially higher standard of more than one person per room then there is little overcrowding in American workingmen's families. However, while the average number of rooms per family are usually quite sufficient, the average room is not so satisfactory. Unfortunately it was not feasible to make an intensive study of the size and suitability of the rooms occupied by the families studied. For the typical family of husband, wife and three children under 15 years, there are in the cities for which tabulations are completed, invariably more than one room per adult male. The rooms per person decline as the size of the family increases. Families having an income of $1,300 also have well over one room per person. The number of rooms per person does not tell us whether housing is satisfactory. For example, the rooms per person are higher among colored families than among white families in Baltimore. No one would maintain, however, that housing conditions are better among the colored people than among the whites.

The amount spent for rent varied from $105 per annum for the lowest income group in Fall River, Mass., to $355 per annum for the highest income group in New York City. For the modal income, $1,350, the average rent paid in large cities is probably not far from $200 per annum for the typical family.

The study does not give a complete or typical picture of housing conditions among workers' families. In order to get comparable figures of family income and family expenditures for food, clothing, housing, and other items, no families were scheduled who kept boarders and no families with more than two lodgers were taken. These rulings were absolutely necessary so as to confine the study to normal natural families, but by so limiting the study no information was obtained as to the extent to which families took boarders and the amount of overcrowding resulting from the almost universal practice of taking in lodgers during the housing shortage of the war period. It is a necessary function of the community to provide suitable houses for the people at reasonable rents. As long as the provision of houses is left to speculators and contractors the workers can not be properly housed.

Fuel and Light.

It is possible to determine from the information on the schedules whether the families studied used enough fuel to keep their houses comfortable, but the information has not yet been tabulated. It is reasonably certain, however, that the American family does consume abundant fuel so that the living room can be lived in during the winter. Light is probably sufficient also.

House Furnishings.

As for house furnishings, all that the schedules give is the yearly expenditure. We know nothing about the stock of household goods possessed by the average American working family. It should not be an impossible task for the domestic science experts to determine the minimum requirements in the way of standard house furnishings for the typical family. A special intensive study could then be made to determine how near our American families come to the minima.

Care of Health.

Among the expenditures lumped as miscellaneous are some highly important and significant items. Expenditures for sickness and death are the most significant in this group. The amount and kind of medical, surgical, dental, and other kinds of treatment in sickness required by the average American family can not be obtained from the family schedules. The amount paid out by each family on account of sickness is given on the schedules, and the average amounts can be computed for different income groups and for all groups combined. The average expenditures vary greatly from family to family and from group to group. In Philadelphia those having incomes less than $900 spent on the average during the year $24.15 for health care, while those with incomes of $2,500 and more expended $126.12. In Boston the expenditures for these two income groups were $23.18 and $67.42, respectively. The average for all incomes in all cities would probably be from $45 to $55.

Despite the great irregularities in the distribution of these expenditures for sickness there is a remarkable increase with the increase in amount of income. This indicates that those in the lower income groups are not able to pay for adequate medical and hospital service, for no one would contend that those in the higher income groups are squandering money recklessly on physicians, surgeons, dentists, and the like.

The value of these figures is greatly lessened by reason of the fact that so much wholly unregulated, uncontrolled, haphazard, unplanned, unintelligent, more or less voluntary, and wholly unrecog-

nized sickness subsidy prevails throughout the country. I mean that the worker is not able to pay full price for the medical, surgical, hospital, and dental services needed by himself and his family, so the community or the subsidized hospital gives him these indispensable services free or below cost. The result is indifferent medical and hospital service at a cost impossible to estimate accurately because there is no uniformity of practice and no adequate public control. In Massachusetts it is estimated that the workmen's compensation cases sent to hospitals for treatment pay only about 50 per cent of the actual cost of the treatment. This is handing out sickness subsidies to employers and insurance companies, not to injured workmen. This is the worst form of protective subsidy to industry. The workers who are driven by dire necessity to make use of the free wards in hospitals either learn to hate and distrust all hospitals and medical men because they are not given proper treatment, or they become partially or wholly hospitalized because they survive the treatment meted out to them and rapidly learn to like the carbolated atmosphere of our hospital almshouses. This systemless system of medical sick benefits, bestowed not as the just and recognized due of the worker but as charity handed out by a benevoent community or by private philanthropists, constitutes the worst possible form of sickness pensions that could possibly be devised. Voluntary benevolent sickness subsidies and pensions achieve the minimum of results at high cost. They reach but a minority of those who need medical and hospital care. I do not point out the obvious defects of the existing system of sickness subsidies in order to condemn the system and recommend its abolishment. On the contrary these subsidies are absolutely indispensable, and can not be abolished without very serious consequences, unless something better is devised to replace them. It is useless to talk of paying the workers a wage sufficient to meet all needed sickness expenses. This would make the misfortunes of the sick redound to the profit of the well. The health of the workers never will be adequately cared for until a system of universal sickness or health insurance is substituted for the present system of sickness subsidies. No valid objection can be raised to the public's paying a part of the expenses of such a system, as the public is responsible, in a large measure, for the unhealth which exists to-day. But the worker should pay a share, for he is responsible in some degree for sickness in his family. Above all he should feel, when he receives medical, surgical, or hospital treatment, that he is receiving services which belong to him of right and are not alms from either the State or private persons.

The sickness and physical deficiencies revealed by the selective draft has happily demolished forever the carefully fostered fallacy that

the American workman is so well paid, so well nourished, housed and clothed, and so intelligent that he needs nothing in addition to the existing agencies to look after his exuberant good health. The quantitative consumption of health-giving and health-maintaining services in the average American family is certainly very much below what is necessary to attain and maintain reasonably good health. It is very clear that the medical profession and the hospitals must be more completely and effectively organized and directed for the purpose of improving the health of the community. Until this is done it is scarcely possible for the average American family to buy the required amount of health service to keep health and efficiency up to a reasonable standard.

Insurance.

Consideration of the adequacy of health expenses brings us directly to the subject of insurance against the hazards of death, sickness, accident, old age and invalidity, and unemployment. In modern life provision against these hazards is just as necessary as medical service, or, for that matter, food. The amounts spent by American families for life insurance in 1918 ranged from about $10 in the lower income groups to about $65 in the higher income groups. The average is probably not far from $40. This amount paid each year in premiums for ordinary life and term life policies would give the average family sufficient protection against the hazard of death. Unfortunately the agents in the field found it impossible to distinguish between so-called "industrial" insurance and bona fide life insurance. It seems at first blush as if it should be easy to differentiate between them on the basis of cost alone, but the amount of the policies was frequently not obtainable from the housewife, so the cost per $100 could not be ascertained. Very often, it was discovered, payments were accepted by the agents of the burial insurance companies semi-annually or even annually, so it was not possible to make the distinction on the basis of the terms of payment of the premiums. About all it is possible to deduce from the schedules as to life insurance is that the workers pay enough on the average to secure sufficient protection against disastrous poverty resulting immediately from the death of the principal breadwinner of the family. Whether they get this sufficient protection is another matter. As explained above, it was impossible to get the *quantity* of and kind of life insurance bought at the prevailing market prices. Furthermore, only a part of the workers are insured at all, and those who most need life insurance are least able to buy it.

While payments for life and burial insurance by the average American family are as large as can be afforded and should buy

enough insurance to protect the family adequately, the case is entirely different in case of casualty insurance and so-called "health insurance." The average expenditures, in Philadelphia, for these two kinds of insurance ranged from nothing in the income groups below $900 to $5.44 in the income groups $1,800 to $2,100. The amount of premiums paid by different families is very irregular. The average amount paid by different income groups and even by all income groups in different cities obeys no statistical law. The average for all families in Boston is 95 cents per annum, while for Philadelphia it is $2.74. It is very evident that no appreciable insurance protection against the hazards of accidental injury or sickness is included in the budget of the American workingman's family. Yet these injuries occur many times more frequently than death, and their hazards are just as readily calculable as is the hazard of death. It is not possible for the worker to buy adequate protection against the hazards of injury from accident and sickness even at the exorbitant prices charged by the private companies, because the companies do not sell the protection needed. The case is even worse with old age, invalidity, and unemployment. Some trade-unions and a few establishments pay small old-age and invalidity benefits. Out-of-work benefits have been paid by a few trade-unions in times of great stress. Unemployment is the one hazard that is purely industrial, and it causes more distress and social demoralization than any other hazard affecting the life and health of the workers. Yet nothing has been done about it by industry and next to nothing by society. Except for the feeble, sporadic help given by a few trade-unions, the whole burden falls upon the individual worker. Industry should be made to pay the costs of production. A part of the costs of production under the present organization of industry is unemployment tempered by underemployment and overemployment. It would be a very simple matter to put the money costs of unemployment upon each industry in which employment is regularly irregular. This should be done. As it is now, the worker does not and can not include in his budget protection against unemployment and the onset of old age and invalidity. Some unascertainable part of his trade-union dues, if he pays any, goes for the purchase of an indefinitely inadequate amount of protection against these ills.

The percentage spent for insurance in all forms is not large, but its importance is much greater than this percentage indicates. Insurance makes for stability of family life, by distributing throughout the community shocks that would crush individuals and families. The present cost of insurance is so high that the workers are debarred from purchasing enough of it. The protection offered by private profit-seeking insurance companies is not secure and many inevitable con-

tingencies are not included in their policies at all. Insurance is a relatively simple matter. It could be conducted as a community enterprise reaching all the people at half the expense now involved. The moral is obvious.

Amusements.

The matter of amusements is one of the most serious things in life. Wholesome laughter is as necessary to health and efficiency as good food and suitable raiment. Unlike the other wants considered, amusement is subjective, not objective, and therefore no objective unit of measure is conceivable. It is wholly impossible to guess how much amusement is obtained from a 17-cent moving-picture show. We know that large numbers of people must be amused by the movies, else the picture houses would not be packed. We can not say, however, that the families which patronize the movies get any more fun out of life than those which stay at home or go to the church festival. You can't keep people from being amused. They will get fun out of the hardest conditions of life. Tom Sawyer, by using the most approved methods of the trust promoter and the professional advertiser, elevated fence whitewashing from the lowest form of menial drudgery to the rank of the most popular outdoor sport in his home town, so that for the time swimming and fishing were forgotten. The variety and weirdness of the different forms of amusement are astonishing. Some people derive much genuine enjoyment from funerals. Others seem to get quite as much fun out of grand opera. I once knew a physician of sound mind who got his recreation and amusement from directing a volunteer church choir. Truly, in the realm of amusement "One man's meat is another man's poison." One man will listen to a lecture on the Russian drama and will be upbuilded and refreshed amazingly; his neighbor will be put to sleep, and another man will be driven toward homicide, by the same lecture. The number of movies, dances, concerts, and the like attended by a worker and his family has no recognizable relation to the quantity of amusement they have imbibed. While all admit that "All work and no play makes Jack a dull boy," it may well be questioned whether the play furnished by the movies will make Jack brighter or duller.

Expenditures for movies increase consistently with increasing income. In Philadelphia only 38 cents per annum was spent for movies by families having incomes under $900, while the families having $2,500 or over spent $37.22. In Boston the range was from 87 cents to $34.39. The average, for all incomes, was $10.18 for Philadelphia and $6.49 for Boston. Other cities show much the same averages and range of expenditures. The total average expenditure for all amusements amounted to $12.40 in Philadelphia and $9.23 in

Boston. We do not know whether this means that Philadelphia working people found existence more amusing than Boston workers, or whether their lives being more sad they were driven to the movies and the pool parlors for cheer. We may assume, I think, that the sums spent for amusement in the income groups above $1,300 are sufficient for recreational and health needs.

Conclusion.

From this very brief analysis of the data thus far worked up from the cost of living schedules it is apparent that there is no such thing as the American standard of living in the sense of a very superior standard giving all the necessaries, many of the comforts, and a goodly supply of the luxuries of life. On the contrary, we find that there are as many different standards as there are different incomes and families of different sizes. In the lower income groups the living conditions are hard indeed. The incomes of the lower paid workers must be increased and the cost of food, clothing, and housing must be lowered to enable these families to meet the higher costs of existence. Social legislation is needed to give them better and cheaper food, clothing, houses, medical treatment, and insurance. Even in the higher income groups conditions are not so easy as they are frequently pictured to us. Let us not be fooled by the cry that the American standard of living is the highest in the world. Let us make the minimum living standard in America one that will support life in decency and health.

Joint Shipping Industrial Conference.

By Benjamin M. Squires.

At the request of the United States Shipping Board a Joint Shipping Industrial Conference was held in Washington, June 4, 5, and 6, 1919. The conference was made up of representatives of the Government and employer and employee representatives of longshore, harbor, coastwise, and over seasshipping interests.

The purpose of the conference is set forth in the following resolutions adopted by the Shipping Board May 20, 1919:

Ocean Marine Conference.

Whereas, Various agreements and arrangements made during war time between ship owners and operators, the seamen, and the Shipping Board have either expired or are no longer adequate to meet peace conditions, and

Whereas, The successful development of an American merchant marine is largely dependent upon the full cooperation of the vessel owners, operators, and managers, the seamen, and the Government, now, therefore,

Be it resolved, That the Shipping Board call a conference at Washington, D. C., to begin on or about June 4, 1919, between owners, operators, and managers of ocean-going coastwise steamships in the United States, the various organizations of seamen and licensed officers, and interested departments of the Shipping Board and other Government departments and agencies, for the purpose of establishing by agreement among the various interested parties suitable agencies for the consideration and adjustment of labor issues and for the promotion of efficiency and industrial harmony in the American merchant marine.

Dock and Harbor Conference.

Whereas, The agreement creating the National Adjustment Commission to which the Shipping Board was a party was effected while this country was at war, and was generally regarded as a war-time agreement, and

Whereas, The National Adjustment Commission agreement was limited in its scope to the control of wages and working conditions and was applicable only to members of the International Longshoremen's Association, and

Whereas, It is highly desirable that parties interested in the loading and unloading of cargo enter into an agreement for the adjustment of labor issues and for the promotion of the best interests of the industry, now, therefore,

Be it resolved, That the Shipping Board call a conference at Washington, D. C., between owners, operators, and managers of steamships, master stevedores and contractors for longshore labor, owners and operators of harbor equipment necessary in the process of loading and unloading vessels and cargo, the various organizations of labor involved, and interested departments of the Shipping Board and other Government departments and agencies, for the purpose of establishing by agreement among the various interested parties suitable agencies for the consideration and adjustment

of labor issues and for the promotion of efficiency and industrial harmony in this industry, and

Be it further resolved, That such conference be called at or about the same time as the marine conference already authorized by the Board.

As indicated by the above resolutions, industrial relations during the war had been governed by agreements. The Atlantic agreement entered into in August, 1917, between the Shipping Board, the International Seamen's Union, and steamship lines, and approved by the Secretary of Commerce and the Secretary of Labor, established wage rates and working conditions for seamen.

In August, 1917, an agreement was entered into between the United States Shipping Board, the Secretary of War, the Secretary of Labor, the American Federation of Labor, the International Longshoremen's Association, and the principal shipping operators on the Atlantic and Gulf coasts, with subsequent ratification and adoption in a modified form by operators on the Pacific coast and the Great Lakes. The agreement provided for a National Adjustment Commission and for local commissions for the adjustment and control of wages, hours, and conditions of labor in the loading and unloading of vessels. Although the jurisdiction of the commission was limited to longshore labor, controversies affecting other classes of marine labor were adjusted by the national commission or by local commissions on the joint submission of employers and employees.

A National Marine Conference held in May, 1918, resulted in an agreement whereby the Shipping Board should settle all marine labor questions arising during the war on the Atlantic and Gulf coasts.

A war-time period of effectiveness was clearly implied in these agreements, and the purpose of the Joint Shipping Industrial Conference was to establish permanent machinery for the adjustment of industrial controversies.

The opening session of the conference was given over to general statements of purpose and plan. Two resolutions were introduced, one calling for the appointment of committees to prepare agreements respectively for seamen and licensed officers, the agreements to provide for "the establishment of suitable machinery for the joint consideration of general labor policies to govern work, employment, and the mutual relations of the interests above mentioned (employers, employees, and the Government); for the arbitration of issues pertaining to compensation and working rules; for the adjustment of grievances; and for the establishment and enforcement of such general standards as will promote the health and efficiency of men employed aboard the vessels of the American merchant marine." The other resolution, phrased somewhat similarly, called for committees to draft agreements for dock and harbor labor respectively.

In discussing the question of the adoption of the resolutions, representatives of ocean marine labor requested that the conference go on record in favor of according preferential treatment in recruiting and employing labor to members of associations of labor. This was an issue, however, that did not concern the longshore interests and it was agreed that the conference should resolve itself into an ocean marine section, a dock section, and a harbor section, further discussion of the resolutions and of the question of union preference being reserved for the sections.

Dock Section.

The question before the dock section was primarily whether the existing adjustment machinery—the National Adjustment Commission and local commissions created under its jurisdiction—should be reconstituted as a permanent agency. In this the dock section had a decided advantage over either the harbor or ocean marine section because the National Adjustment Commission was in the nature of a successful experiment and neither employers nor employees were willing to return to prewar methods of adjusting differences. It appeared, however, that the conference was not fully representative of employing interests in the longshore industry, in that representatives of foreign lines were not present. Under these circumstances, representatives of American lines felt it unwise to commit themselves definitely to a plan of adjustment. An adjournment was taken until the following day at which time the dock section indorsed the following agreement subject to ratification by the various interests:

Tentative Draft of Agreement to Govern Industrial Relations in the Longshore Industry.

Preamble.

In order that the spirit of mutual responsibility and helpfulness with which employers and employees engaged in the loading and unloading of vessels cooperated with the Government in meeting the exigencies of a wartime situation may find permanent expression in an arrangement whereby employers, employees, and the Government may work together in the successful development of our maritime commerce, and through joint participation in matters pertaining to industrial relations, assure that the legitimate rights of all concerned in the industry shall be safeguarded, this agreement is entered into this —— day of June, 1919, by the undersigned representatives of dock and harbor labor, employers of such labor, and the United States Shipping Board.

ARTICLE I.—*National Dock Industrial Council.*

There shall be established by the parties to this agreement a National Dock Industrial Council which shall be responsible for and have jurisdiction over industrial relations so far as they affect loading and unloading operations done under the control or on account of signatory parties or parties which may subsequently join in this agreement.

ARTICLE II.—*Membership—National Dock Industrial Council.*

The National Dock Industrial Council shall be composed as follows: One member chosen by the United States Shipping Board and two members chosen by employers and employees, respectively, for each of the following interests:

1. Pacific coastwise.
2. Pacific deep-sea.
3. North Atlantic coastwise.
4. North Atlantic deep-sea.
5. South Atlantic coastwise.
6. South Atlantic deep-sea.
7. Gulf coastwise.
8. Gulf deep-sea.
9. Great Lakes.

Permanent advisory members may be chosen by the Navy Department, the Department of Commerce, and the Department of Labor, and temporary advisory members as occasion requires by the War Department and the United States Railroad Administration.

Members shall hold office for one year or until their successors are appointed and shall be allowed to name alternates when personal attendance is impossible or impracticable.

ARTICLE III.—*Functions—National Dock Industrial Council.*

The functions of the National Dock Industrial Council shall be to secure the largest possible measure of joint action between employers, employees, and the Government for the development of maritime commerce and for promoting the legitimate interests of all engaged therein. This shall include the consideration of wages, hours and working conditions in relation to the industry as a whole, the question of regularizing employment, the collection of statistics and information on matters appertaining to the industry, the establishment and enforcement of general standards to insure health, safety and efficiency, the cooperation with councils in other industries in matters of common interest and the representation to the Government of the needs of the industry.

The National Dock Industrial Council shall have broad authority to establish suitable rules of procedure and to interpret this agreement. It shall also have authority to establish or approve rules of procedure for its authorized agencies and to limit their jurisdiction.

ARTICLE IV.—*Meetings—National Dock Industrial Council.*

The National Dock Industrial Council shall meet at least twice a year at a time and place to be designated by the council. Special meetings shall be called by the chairman on the request of a majority of the council. The call for such meetings shall be sent out at least two weeks before the date set for the special meeting and shall contain a statement of the matters to be taken up at such meeting. The provision for two weeks' notice, however, may be waived in cases of real emergency.

ARTICLE V.—*National Dock Adjustment Commission.*

A National Dock Adjustment Commission is hereby established, composed of five active members selected from the National Dock Industrial Council as follows: The representatives of the United States Shipping Board and two representatives of employers and employees respectively serving alternately to represent the particular interest affected. The advisory members on the council representing the War Department, Navy Department, and the United States Railroad Administration, may sit with the commission in an advisory capacity on all matters coming before it. It is understood, however, that nothing in this agreement shall prevent the election of identical representation on the commission by different group interests of employers and employees.

ARTICLE VI.—*Functions—National Dock Adjustment Commission.*

The functions of the National Dock Adjustment Commission shall be as follows:

1. The adjustment of wages and working conditions of men engaged in the loading and unloading of vessels, including the following cases:

(*a*) Where no local agency exists for such adjustment.

(*b*) Where the local agency is unable to adjust.

(*c*) On appeal from the decision of the local agency.

(*d*) On the joint request of employers and employees.

(*e*) Where questions involved are of common interest to two or more ports.

It is understood, however, that where arrangements now exist or may subsequently be made for the consideration of industrial controversies nothing in this agreement shall operate to disturb such arrangements so long as they are mutually satisfactory to employers and employees.

2. The current negotiation of agreements and their modification to avoid future disputes.

3. Acting under the direction of the National Dock Industrial Council in the exercise of the functions of the council.

ARTICLE VII.—*Local dock adjustment commission.*

Wherever necessary or advisable the National Dock Adjustment Commission shall establish local dock adjustment commissions which shall be responsible in the first instance for the arbitration and adjustment of controversies arising in particular ports. The composition of local adjustment commissions shall be similar to that of the National Commission which shall have supervision over all local commissions.

ARTICLE VIII.—*Special committees.*

Special committees may be appointed by the National Dock Industrial Council or by the National Dock Adjustment Commission for the purpose of investigating and reporting on matters of general interest to the industry or of particular interest to the council or to the commission.

ARTICLE IX.—*Permanent executive secretary.*

The National Dock Industrial Council shall select a permanent executive secretary at a salary to be determined by the council, who shall serve also as the executive secretary of the National Dock Adjustment Commission and who shall be charged generally with the administrative functions of the council and the commission.

ARTICLE X.—*Expenses.*

Members of the National Dock Industrial Council, the National Dock Adjustment Commission or local dock adjustment commissions shall serve without salary, but expenses incurred by the council, by the National Commission or local commissions in the discharge of their functions shall be defrayed equally by employer and employee parties to this agreement and by the United States Shipping Board in such manner and with such safeguards as the council may determine.

ARTICLE XI.—*Amendments.*

This agreement may be amended upon the affirmative vote of a majority of the voting employer and employee members of the council.

ARTICLE XII.—*Obligation of parties.*

No stoppage or lockout shall take place until any differences or disputes between the parties shall have been referred to and dealt with according to this agreement or rules which may be established under it. The parties obligate themselves to give effectiveness, so far as possible, to the recommendations of the National Dock Industrial Council or its agencies, and to take such steps as may be necessary to assure the carrying out of this agreement by individual members of the association signatory thereto. No indemnity, strike pay, assistance or encouragement, directly or indirectly, shall be afforded by any signatory organization or by any officer or individual member thereof, to any person or persons failing to submit a difference or dispute as provided by this agreement or rules established under it or to any person or persons acting in breach of a decision of the National Dock Industrial Council or its authorized agencies.

ARTICLE XIII.—*Duration of agreement and withdrawals.*

This agreement shall become effective on the date first above written and shall continue in effect for one year thereafter. After the expiration of one year, this agreement shall continue except that any party thereto may withdraw 60 days after written notice of such intention to withdraw has been filed with the secretary of the National Dock Industrial Council, but such withdrawal shall not terminate the agreement with respect to the remaining parties as long as such parties comprise employer groups, employee groups, and the Government.

It will be observed that the agreement provides for a National Dock Industrial Council, the functions of which are chiefly legislative and advisory; for a National Dock Adjustment Commission which acts as an administrative agency of the council and as a judicial body on appeal; and for local dock adjustment commissions with original jurisdiction in matters pertaining to each port. Government representation is accorded to the council and commissions and a part of the expense is to be borne by the Government.

Harbor Section.

Evidences of a prearranged program on the question of preferential treatment appeared in the discussions of the harbor section. Representatives of employees were ready to proceed with the appointment of a committee if employers would first state that union members should have preference in employment. Employers were unwilling to accede to this and objected, moreover, to any form of central authority in the adjudication of local matters. A resolution was proposed by employers recommending the establishment in each port of a local board made up of equal numbers of employers and employees. Representatives of employees asked that the board be made up of equal numbers of representatives of employers and of associations of employees. A committee was appointed to draft and submit a resolution. The committee reported the following resolution, which was accepted by the conference:

Resolved, That it is the sense of this conference that the adjustment of all matters between employers and employees in the operation of marine harbor equipment is a

matter of local concern affecting only the particular port involved and that the adjustment of any differences should be by collective action of the parties in interest and in order that this may be encouraged, be it further

Resolved, That this conference recommend that in each port where satisfactory arrangements do not now exist a local board be created consisting of equal numbers of representatives of employers and representatives of employees to settle and adjust all matters in dispute between them and that in case of a deadlock, the local board shall select an impartial umpire in such manner as it may determine.

The committee also discussed and recommended for submission to the various harbor interests the following tentative agreement for a National Harbor Industrial Council:

Tentative Draft of Agreement to Govern Industrial Relations in the Harbor Marine Industry.

Preamble.

In order that employers and employees engaged in the operation of harbor craft and other harbor marine equipment may cooperate more fully with the Government and with other branches of the marine industry in the successful development of our maritime commerce, and through joint participation in matters pertaining to industrial relations assure that the legitimate rights of all concerned in the industry shall be safeguarded, this agreement is entered into this day of June, 1919, by the undersigned representatives of owners and operators of harbor craft and other harbor marine equipment, employers thereof and the United States Shipping Board.

ARTICLE I.—*National Harbor Industrial Council.*

There shall be established by the parties to this agreement a National Harbor Industrial Council, which shall consist of equal numbers of employers and employees selected by the signatory parties or parties which may subsequently join this agreement and of representatives of the Government.

ARTICLE II.—*Number and apportionment of members.*

For each class of harbor marine labor affected, employers and employees shall be entitled to one representative for each of the following districts: North Atlantic, South Atlantic and Gulf, Great Lakes, and Pacific. Advisory members to the council are to be named by each of the following Government departments or agencies: Shipping Board, War Department, Navy Department, Railroad Administration, Department of Labor, and the Department of Commerce. Members shall hold office for one year or until their successors are appointed, and may select alternates to sit when personal attendance is impossible or impracticable.

ARTICLE III.—*Functions.*

The functions of the National Harbor Industrial Council shall be in general to secure the largest possible measure of joint action between employers and employees and the Government for the development of maritime commerce and for promoting the legitimate interests of all engaged therein. In the exercise of these functions the councils, through special committees or otherwise, may consider and make recommendation, concerning such questions as harbor development and the efficient operation of harbor marine equipment; wages, hours, and working conditions in relation to the industry as a whole; the establishment and enforcement of general standards to insure health, safety, and efficiency; collect statistics and information pertaining to the industry;

assist in the negotiation of local agreements and the establishment of local machinery of adjustment; cooperate with councils in other industries in matters of common interest and represent the needs of the industry to appropriate Government agencies.

The council shall act as an arbitration body in case of failure of local adjustment agencies to effect a settlement of matters in dispute or where such agencies have not been set up and an adjustment can not be reached between the parties or on joint submission of the parties in dispute.

ARTICLE IV.—*Voting.*

In the consideration of matters affecting the industry as a whole, all active members of the council shall be entitled to vote; in matters affecting a particular industry or class of labor only representatives of that district or that class of labor, and an equal number of employer representatives of that district, shall be entitled to vote, though other members of the council may participate in the deliberations. Representatives of the Government to the council shall not be entitled to vote except as hereinafter provided.

ARTICLE V.—*Meetings.*

The National Harbor Industrial Council shall meet at least twice a year at a time and place to be designated by the council. Special meetings of the council or of sections thereof shall be called by the chairman on the request of a majority of the council or of a section of the council whose particular interests represented by the section require consideration. Except in the case of grave emergency the call for such meetings shall be sent out at least two weeks before the date set for the meeting and shall contain a statement of the matters to be taken up at the meeting.

ARTICLE VI.—*Local harbor adjustment commission.*

The National Harbor Industrial Council shall encourage and assist in the setting up in each important harbor of a harbor adjustment commission composed of an equal number of representatives of owners and operators of harbor craft and other marine equipment and employees thereof. The number of representatives on the local commission will be determined by the needs of each harbor, and it shall be left to the parties in interest to determine whether an impartial member shall be chosen to act as chairman and give a casting vote. It is understood, however, that where arrangements now exist for the consideration of industrial controversies nothing in this agreement shall operate to disturb such arrangements so long as they are mutually satisfactory to employers and employees.

The adjustment of matters pertaining to each particular harbor shall be adjusted wherever possible by the local harbor adjustment commission. If the local commission is unable to bring about an adjustment of the matters in dispute or if a local agency has not been set up and the parties in dispute are unable to agree on a settlement, the National Harbor Industrial Council, sitting as a whole or a section thereof, composed of representatives of the district or interests affected, shall hear and determine the case. If a majority of the active members of the council are unable to agree on a settlement, the advisory Government representatives to the council shall cast the determining vote, the decision in either case to be final and binding on all the parties affected.

ARTICLE VII.—*Permanent executive secretary.*

The National Harbor Industrial Council shall select a permanent executive secretary, at a salary to be determined by the council, who shall be charged generally with the administrative work of the council.

ARTICLE VIII.—*Expenses.*

Members of the National Harbor Industrial Council and of local harbor adjustment commissions shall serve without salary, but expenses incurred by the council or by the local commissions shall be defrayed equally by employer and employee parties to this agreement in such manner and with such safeguards as the council may determine.

ARTICLE IX.—*Amendments.*

This agreement may be amended upon the affirmative vote of the majority of the voting employer and employee members of the council.

ARTICLE X.—*Obligation of parties.*

No stoppage or lockout shall take place until any differences or disputes between the parties shall have been referred to and dealt with according to this agreement or rules which may be established under it. The parties obligate themselves to give effectiveness, so far as possible, to the recommendations of the National Harbor Industrial Council or local harbor adjustment commission and to take such steps as may be necessary to assure the carrying out of this agreement by individual members of the associations signatory thereto. No indemnity, strike pay, assistance or encouragement, directly or indirectly, shall be afforded by any signatory organization or by any officer or individual member thereof to any person or persons failing to submit a difference or dispute as provided by this agreement or rules established under it or to any person or persons acting in breach of a decision of the National Harbor Industrial Council or local harbor adjustment commissions.

ARTICLE XI.—*Duration of agreement and withdrawals.*

This agreement shall become effective on the date first above written and shall continue in effect for one year thereafter. After the expiration of one year, this agreement shall continue except that any party thereto may withdraw 60 days after written notice of such intention to withdraw has been filed with the secretary of the National Harbor Industrial Council, but such withdrawal shall not terminate the agreement with respect to the remaining parties as long as such parties comprise employer and employee groups and the Government.

Ocean Marine Section.

The ocean marine section of the Shipping Conference deadlocked from the first on the question of preference to union members. Representatives of employees claimed that they understood the main purpose of the conference to be the settlement of controversial issues. A committee was appointed, and after two days' discussion the following resolution was reported back and adopted by the conference:

WHEREAS, Certain agreements fixing compensation and conditions of labor on the Atlantic and Gulf coasts have expired, and certain demands have been made by organizations affiliated with the International Seamen's Union and licensed officers' organizations: Now, therefore be it

Resolved, That these demands received on or before June 7 be submitted to the American Steamship Association and other shipowners in the Atlantic and Gulf districts for their consideration; and be it further

Resolved, That the conference recommends that various shipowners should appoint representatives to confer with representatives of the union and of the Shipping Board, for the purpose of reaching an agreement, and that this committee shall meet on June 23 at New York City, and be it further

Resolved, That the conference recommends that this committee should also consider and make recommendations as to the establishment of local grievance committees at Atlantic and Gulf ports, and also the establishment of a central appeal board.

National Guilds Movement in Great Britain.

By G. D. H. Cole.

THE objects of the national guilds movement in Great Britain, as defined in the constitution of the National Guilds League, are "the abolition of the wage system, and the establishment by the workers of self-government in industry through a democratic system of national guilds working in conjunction with a democratic State." The leading ideas of the movement are therefore those of democratic organization and self-government in the industrial sphere. National guildsmen look forward to the time when the various industries and services will be administered each by its guild, or association organized for common service, and including the whole necessary personnel of the industry concerned.

This movement is only a few years old; but it has made considerable headway among the manual workers, and to at least an equal extent among many classes of professional and technical workers. By Marxian Industrial Unionists and others of the extreme left wing of labor, it is indeed sometimes denounced as a bourgeois movement of counter-revolutionary tendency. This criticism comes principally from those who refuse to recognize the importance of technical and professional elements in the industrial system, or hold that the existing technicians and professionals are "adherents of capitalism," and that it is necessary to make a clean sweep of them in preparation for a new order ushered in by a proletarian dictatorship.

National guildsmen differ widely in their outlook on the social and economic question as a whole. Faith in national guilds as a form of economic organization is compatible with many degrees of reformist or revolutionary opinion. There are all sorts among guildsmen, from the extreme right, which looks to a gradual development of guilds by the consent of the more progressive employers, to the extreme left, which corresponds closely in method and outlook to the Marxian Industrial Unionists. Neither of these attitudes, however, represents the main, or even a considerable, body of guild opinion, which must be sought in views falling between the two extremes.

Origin and Development of National Guilds Movement.

It will be easier to explain the present orientation of the national guilds movement if we begin with a short account of its origin and development. It has only gradually attained to its present scope

and character, and a number of different and even diverse influences have contributed to its formation. Its earliest manifestation is attributable to Mr. Arthur J. Penty, whose book on The Restoration of the Guild System was published in England in 1906. About the same time, Mr. A. R. Orage then as now editor of the New Age, contributed to the Fortnightly Review an article on the same subject. Mr. Orage was, and has remained, in close touch with Mr. Penty; but in his hands the guild doctrine soon began to follow a new line of development. In 1908, Mr. S. G. Hobson, a former member of the Fabian Society, who had left that body after an unsuccessful attempt to launch a scheme for independent Socialist political representation, became associated with Mr. Orage on the New Age. Shortly after this, a series of articles written by Mr. Hobson with the collaboration of Mr. Orage, most of which were subsequently reprinted in the book National Guilds: an Enquiry into the Wage-System and the Way Out, began to appear. This series of articles really gave the national guilds movement its definite shape, and made it for the first time a practical and constructive force.

The essential feature introduced by Messrs. Hobson and Orage—the feature which gave the national guilds movement its characteristic turn—was the definite association of the idea of industrial self-government with the existing structure of the British trade-union movement, and the definite attempt to formulate a proposal for the conversion of trade-unions into guilds, that is, of protective organizations of wage or salary earners into managing and controlling organizations, including the whole necessary personnel of industry. This does not mean that the full implications of this association of ideas were at this stage completely thought out, or that the practical steps necessary for the accomplishment of the change were clearly proposed. It means only that the vital idea of national guilds appeared for the first time, and that the way was thus made clear for further developments.

Indeed, at this stage the appeal of the national guilds idea was almost purely intellectual. No propaganda was proceeding outside the columns of the New Age, and the circulation of that journal was almost wholly confined to a section of the "intelligentsia." The great bulk of the Socialist and trade-union movements remained unaffected; only in the university Socialist societies and among middle-class Socialists and professionals did the idea make any progress. It had its partisans among the younger members of the Fabian Society; but the great bulk of that society, and practically all the official leaders of the labor and Socialist movement, were at this time definitely hostile.

In the industrial labor movement as a whole, this period was one of great and growing unrest. From 1910 onward to the outbreak of the war unrest grew steadily and many great strikes took place, including the great railway and transport strike of 1911 and the mining strike of 1912. This spirit of unrest led to a ferment of ideas in the labor world. Before 1910 the Socialist Labor Party and the Industrial Workers of Great Britain (offshoots of the American S. L. P. and De Leonite I. W. W.) had been active in Scotland and some districts of the North of England; but the atmosphere was unfavorable, and they made little progress. From 1911 onward the conditions were far more favorable; but the leadership of the left wing passed rather to movements under the influence of French Syndicalist ideas. The Industrial Syndicalist Education League, led by Mr. Tom Mann, had a considerable transient success, and closely related to it were the various amalgamation committees and other "rebel" bodies which are the ancestors of the "rank and file" movements of to-day. In South Wales, the Marxians through the Industrial Democracy League and the Miners' Unofficial Reform Committee gained ground considerably, while the foundation of the Central Labor College and the Plebs League gave the Marxians a means of propaganda on a national scale. Only at a later period, from 1916 onward, did the big growth of the Marxian Socialist Labor Party begin.

At the beginning of 1914 Mr. W. Mellor, since general secretary of the National Guilds League, and the writer began to develop guild ideas by regular articles in the Daily Herald, the object of these articles being to popularize guild propaganda and to bring it into the closest possible relation to the everyday work of the trade-union movement. Toward the end of 1914, despite the outbreak of war, it was felt that the time was ripe for a further development, and a small private conference was held in December at Storrington in Sussex, at which a long statement was drawn up formulating unanimous conclusions on the theory of national guilds and the steps necessary for their attainment. This conference was followed a month or two later by a second conference at Oxford, where it was definitely decided to proceed to the formation of a propagandist organization for spreading the guild idea. A third and considerably larger conference was held in London at Easter, 1915, and at this conference the National Guilds League was definitely founded.

Work of the National Guilds League.

Since that time the spread of the guild idea has been rapid in the trade-union world, among Socialists, and also among the professional classes. The National Guilds League has directed its principal

propaganda toward the trade-union world; but everywhere its groups include not only trade-unionists but also professional men, teachers, journalists, and even employers. It has never been, and has never sought to be, a large organization. It has concentrated its propaganda work entirely upon the question of industrial and professional self-government, and its aim has been to enroll persons willing to work for the guild idea with a full understanding of its principles. Its influence has therefore been out of all proportion to its numerical strength; the influence of the National Guilds League has spread far and wide, while its actual membership still remains at a few hundreds. It has the advantage of possessing among its members a considerable proportion of fairly well-known writers, and in consequence it is enabled to spread its influence over a wide field.

A few instances will serve to explain the extent and character of this influence. The new secretary of the Miners' Federation of Great Britain, Mr. Frank H. Hodges, is a guildsman. Before attaining to his present position he moved, at the 1918 miners' conference, a resolution calling for the redrafting of the mines nationalization bill on guild lines. This was carried, and the miners proceeded to redraft their bill accordingly. Early in 1919 they were called upon to lay their proposals before the coal commission. Their principal witness was Mr. W. Straker, another guildsman, secretary of the Northumberland Miners' Association, who presented before the commission a scheme for guild control. Mr. R. H. Tawney, another guildsman, is a member of the coal commission, together with Mr. Hodges. Thus, while there are comparatively few actual miner members of the National Guilds League, the policy of the league has to a great extent secured the support of the Miners' Federation.

The case is the same with the railway men. The programs both of the National Union of Railwaymen and of the Railway Clerks' Association are closely in conformity with the proposals of the National Guilds League, both alike aiming at the immediate national ownership of the industry and at the establishment of a system of joint control by the trade-unions and the State. The programs of the post office trade-unions are even more closely allied to national guilds, and in this case also there is a close personal association between the two movements.

A somewhat different instance is that of the National Union of Teachers, which has just carried a national guilds amendment, moved by Mr. W. W. Hill, an active guildsman, by an overwhelming majority. In yet another sphere, the annual conference of the Independent Labor Party has just redefined its objects so as to bring them into conformity with guild ideas.

Of course, it must not be imagined that the majority of British workers, manual or professional, are national guildsmen, or have ever heard of national guilds. The success of guild propaganda comes largely from the fact that it is working with the grain, and that circumstances are forcing the industries of Great Britain in the direction of guild organization. The conscious guildsman is still a rarity; but, with or without guildsmen, the guild idea continues to make headway in theory and practice alike.

Industrial Self-Government.

It is now time to say more about the content and meaning of this idea of which we have so far been describing the external manifestations. Its central doctrine, as we have seen, is that the various industries and services ought to be democratically administered by those who work in them. It is, in fact, an attempt to apply to the industrial sphere the principles of democracy and self-government which, in theory at least, are accepted as applying in the sphere of political government.

Guildsmen begin with an analysis of the existing industrial system from the standpoint of the wage worker. Their initial dogma is one which Mr. Gompers and others have made familiar (though with a different meaning) in the United States. It is that the labor of a human being is not a commodity or article of commerce, and that the present wage system, in treating labor as a commodity, is guilty of a violation of human justice and of human needs. Guildsmen point out (in common with Marx and many other writers) that the theory of the wage system is that the worker sells his labor power in return for a wage, and in so doing surrenders all claim not only to the product of his labor, but also to the control of the manner in which his labor is used. It is true that this theory is not fully realized in fact, because the collective intervention of trade-unions in industrial affairs does give the workers, in varying degrees, a considerable control over the manner in which their labor is used. This control, however, is purely negative; it amounts at most to a veto upon the employers' proposals for the use of labor, and not to any positive control by the workers over the conditions of their industry. It therefore necessarily tends to be restrictive rather than directive in its operation.

This system, and indeed the whole existing industrial order, rests upon the willingness of the workers, or the compulsion upon the workers, to go on working for a wage. As soon as the workers refuse to work for wages, and are strong enough to implement their refusal, the wage system necessarily collapses. The vulnerable point of the capitalist system is therefore to be found in its dependence upon the

acquiescence of labor. The "way out" of the wage system, in the view of the national guilds writers, lies, then, in a refusal by the workers to work for wages. This implies a growth in power and consciousness on the part of labor, and a transference of the "control of labor" from the employers to the trade-unions. Guildsmen therefore work for a monopoly of labor and the creation of a blackleg-proof trade-union organization, both by a widening of trade-union membership among the manual workers, and by a progressive inclusion in the trade-unions of the workers concerned in management, technicians, professionals and supervisors.

The problem, however, is not merely one of widening trade-union membership. It also involves a reorganization of trade-union structure and policy. Guildsmen desire that trade-unions should direct their policy expressly to the securing of control over industry through the control of labor. They envisage the strategy of trade-unionism as a constant encroachment upon the sphere of control at present occupied by the employer or his representatives. Two instances will serve to indicate the general lines of this policy. In the first place, foremen and other supervisors are at present appointed and paid by the employer, and are often compelled to resign trade-union membership, or at least active membership, on their appointment. Guildsmen desire that foremen and other direct supervisors of labor should be chosen (subject to qualifications for the post) by the workers, and that they should be members of the trade-unions including these workers. Moreover, guildsmen desire that such supervisors should be paid by the union and not by the employer. Indeed, they desire that all workers should be in this position, the union making a collective contract with the employer for the whole of the labor employed, and then paying the various individuals, including the supervisors, out of the sum realized. This might operate either under a time-work, or under a collective piecework, system.

Secondly, guildsmen lay great stress upon the development of workshop organization as an integral part of trade-union machinery. They see in the shop steward and the trade-union works committee the germ of an organization capable of assuming control of the productive processes in the workshop. They have therefore devoted considerable attention to the growth of this movement, and have endeavored to bring out the importance of giving to it, as far as possible, a constructive character. At the same time, they have urged the importance of giving to workshop machinery a greater recognition and a more assured place in trade-union organization. In particular, they have emphasized the need for using workshop ma-

chinery as a means of fitting the trade-unions for assuming the function of industrial management.

Of course, the greatest barrier to development in the lines suggested above is recognized by guildsmen as lying in the present chaotic and sectional organization of British trade-unionism. They are therefore advocates of union by industry, and of the systematic amalgamation of trade-unions on industrial lines. They recognize that it is impossible for the workers to assume any considerable measure of control while they are divided among a large number of sectional, and often competing or overlapping, unions, so that in any particular establishment the workers employed often belong to as many as a dozen separate societies and sometimes to many more. A real policy of control clearly implies the unification of forces, and guildsmen have therefore been prominent in the movement for amalgamation, and also for the organization of the salaried employees in trade-unions and, wherever possible, their fusion in one society with the manual workers.

Nationalization of Industry.

Some of the measures suggested above are directed primarily to the assumption of control in cases in which industries continue to be privately owned. Guildsmen, however, are opposed to private ownership of industry, and strongly in favor of public ownership. Of course this does not mean that they desire to see industry bureaucratically administered by State departments. They aim at the control of industry by national guilds including the whole personnel of the industry. But they do not desire the ownership of any industry by the workers employed in it. Their aim is to establish industrial democracy by placing the administration in the hands of the workers, but at the same time to eliminate profit by placing the ownership in the hands of the public. Thus the workers in a guild will not be working for profit. The prices of their commodities and indirectly at least the level of their remuneration will be subject to a considerable measure of public control. The guild system is one of industrial partnership between the workers and the public, and is thereby sharply distinguished from the proposals known as "Syndicalist."

Immediately, guildsmen press for the nationalization or municipalization of the ownership of every industry or service which can be regarded as ripe for public ownership, and especially of such great public service as mines, railways, and other transport, shipbuilding, and electricity. At the same time, in connection with any such measure of nationalization, they aim at the immediate establishment of a system of joint control, in order that the workers may at once

assume the fullest share in the administration that is immediately practicable. For instance, in the case of the mines, guildsmen suggest as an immediate measure administration by a mining council half of which will represent the mining trade-unions, the other half being appointed by the State from technical experts and, perhaps, from persons chosen to represent consumers. This would not, of course, mean the setting up of a mining guild; but it would, in the opinion of guildsmen, be a long step toward the creation of such a body.

Theoretical Aspects of National Guilds Movement.

Turning now to some of the more theoretical aspects of the national guilds system: As explained at the outset, the government idea of national guilds is that of industrial self-government and democracy. Guildsmen hold that democratic principles are fully as applicable to industry as to politics. Indeed, they feel that political institutions can never be really or fully democratic unless they are combined with democratic institutions in the industrial sphere. Their contention is that true democracy must really be functional democracy, in the sense that a democratic commonwealth can only be based on the democratic organization of all its parts. From the standpoint of the individual citizen this means that he should be self-governing in relation to the various functions which he performs—self-governing in his economic life as a producer as well as in his life as a member of the State or local authority.

The basic argument put forward by national guildsmen is a twofold argument. It is at once human and economic. On the human side, it urges that human freedom, in the sense of self-government, is an ultimate good; and that any system that does not assure this self-government has to incur the blame of inhumanity. The human argument is that men ought to be self-governing, quite apart from the economic consequences of self-government.

The economic argument is rather more complicated. It is that the best way of getting industry efficiently organized is to rely on the good will, and to enlist to the full the cooperation, of the persons employed in it. This general argument, moreover, is strongly reinforced by a reference to the immediate economic situation. Guildsmen point out that the control over labor hitherto exercised by the capitalist under the existing system is breaking down; its operation is already subject to considerable limitations, and its progressive limitation is proceeding at an increasing rate. The continuance of capitalist industry and of the wage system is thus becoming constantly more precarious, more liable to interruptions by labor troubles, and more seriously menaced with absolute stoppage. Guildsmen contend that before the existing system completely breaks down, it

is necessary to begin its replacement by a democratic system, and that this replacement must begin at once if an intervening period of anarchy, following upon a complete breakdown of the wage system, is to be avoided. Above everything else, the guildsman contends that the future of society can be assured only by the adoption of an economic system based on trust of the individual worker and on the enlistment of human cooperation in industry by the progressive establishment of democratic forms and methods of administration.

PRICES AND COST OF LIVING.

Retail Prices of Food in the United States.

THE retail price of 22 articles of food combined for which weights were secured for the United States was 2 per cent higher on May 15, 1919, than on April 15, 1919. Of 41 articles for which prices were secured for May 15, 1919, and April 15, 1919, making comparison possible, 26 show an increase in price in May, 1919, as compared with April. The greatest increase, 55 per cent, was in the price of onions. This was due to the new onions having just come on the market. Eggs increased 8 per cent; lard, 10 per cent; potatoes and prunes, 6 per cent each; cabbage and coffee, 5 per cent each; pork chops and flour, 4 per cent each; round steak, ham, oleomargarine, corn meal and bananas, 3 per cent each; sirloin steak and rib roast, 2 per cent each; chuck roast, hens, evaporated milk, cheese, Crisco, corn flakes, and raisins, 1 per cent each. Nut margarine, Cream of Wheat, and tea increased less than five-tenths of 1 per cent.

The following articles showed a decrease in price in May as compared with April: Butter, 5 per cent; oranges, 3 per cent; bacon, lamb, salmon, fresh milk, navy beans, baked beans, canned corn, and canned tomatoes, 1 per cent each. Plate beef decreased less than five-tenths of 1 per cent.

Bread, rice, canned peas, and sugar showed no change in price.

Prices are given this month for two articles not previously shown, rolled oats and macaroni.

The increase in the cost of 22 food articles, for which weights were secured, on May 15, 1919, as compared with May 15, 1918, was 17 per cent. In this period, onions increased 91 per cent; potatoes, 50 per cent; prunes, 41 per cent; coffee, 35 per cent; butter, 33 per cent; cheese, 26 per cent; eggs, 25 per cent; ham, 20 per cent; pork chops, 17 per cent; lard, 18 per cent; sugar, 16 per cent; hens, 15 per cent; flour, 14 per cent; fresh milk, 13 per cent; bacon, 12 per cent; sirloin steak and rib roast, 11 per cent each; round steak, rice, tea, and raisins, 9 per cent; lamb and salmon, 8 per cent each; chuck roast, 7 per cent; plate beef, 3 per cent. Navy beans decreased 33 per cent and corn meal 11 per cent. There was no change in the price of bread or corn meal.

Effort is made by the bureau to secure quotations on similar grades of commodities in the different cities. There are, however, some local customs which must be considered when any comparison is made of the prices in the different cities. The method of cutting sirloin steak in Boston, Mass.; Manchester, N. H.; Philadelphia, Pa.; Providence, R. I.; and Portland, Me., differs from that in other cities. The cut known as "sirloin" in these five cities would be in other cities known as "porterhouse." There is in these cities, owing to the methods of dividing the round from the loin, no cut that corresponds to that of "sirloin" in other cities. There is also a greater amount of trimming demanded by the retail trade in these cities than in others. This is particularly true of Providence, R. I. These, together with the fact that almost all the cattle sold are corn fed, are the main reasons why the retail prices of meats in these cities are higher than in others.

AVERAGE RETAIL PRICES AND PER CENT OF INCREASE OR DECREASE IN THE UNITED STATES MAY 15, 1919, COMPARED WITH MAY 15, 1918, AND APR. 15, 1919.

Article.	Unit.	Average retail price.			Per cent of increase (+) or decrease (−) May 15, 1919, compared with—	
		May 15, 1918.	Apr. 15, 1919.	May 15, 1919.	May 15, 1918.	Apr. 15, 1919.
		Cents.	*Cents.*	*Cents.*		
Sirloin steak	Pound	40.0	43.7	44.4	+11	+ 2
Round steak	do	38.0	40.5	41.6	+ 9	+ 3
Rib roast	do	31.8	34.6	35.2	+11	+ 2
Chuck roast	do	27.8	29.4	29.7	+ 7	+ 1
Plate beef	do	21.9	22.6	22.5	+ 3	(1)
Pork chops	do	36.7	41.4	43.0	+17	+ 4
Bacon	do	50.5	57.2	56.7	+12	− 1
Ham	do	45.6	52.9	54.6	+20	+ 3
Lamb	do	36.8	39.9	39.6	+ 8	− 1
Hens	do	37.9	43.0	43.5	+15	+ 1
Salmon, canned	do	29.6	32.2	31.9	+ 8	− 1
Milk, fresh	Quart	13.2	15.0	14.9	+13	− 1
Milk, evaporated (unsweetened)	(2)	.....	15.0	15.1	.....	+ 1
Butter	Pound	51.0	71.3	67.9	+33	− 5
Oleomargarine	do	.....	39.2	40.4	.....	+ 3
Nut margarine	do	.....	35.2	35.3	.....	(3)
Cheese	do	33.4	41.9	42.2	+26	+ 1
Lard	do	32.9	35.3	38.8	+18	+10
Crisco	do	.....	33.4	33.9	.....	+ 1
Eggs, strictly fresh	Dozen	42.4	49.3	53.1	+25	+ 8
Bread	Pound [4]	9.8	9.8	9.8	(5)	(5)
Flour	do	6.6	7.2	7.5	+14	+ 4
Corn meal	do	7.0	6.0	6.2	−11	+ 3
Rolled oats	do	.....	.....	8.4	.....	.....
Corn flakes	8-oz. pkg.	.....	14.0	14.1	.....	+ 1
Cream of Wheat	28-oz. pkg.	.....	25.0	25.1	.....	(3)
Rice	Pound	12.3	13.4	13.4	+ 9	(5)
Macaroni	do	.....	.....	19.0	.....	.....
Beans, navy	do	17.8	12.1	12.0	−33	− 1
Potatoes	do	2.2	3.1	3.3	+50	+ 6
Onions	do	5.6	6.9	10.7	+91	+55
Cabbage	do	.....	9.1	9.6	.....	+ 5
Beans, baked	No. 2 can	.....	17.7	17.5	.....	− 1
Corn, canned	do	.....	19.2	19.1	.....	− 1
Peas, canned	do	.....	19.0	19.0	.....	(5)
Tomatoes, canned	do	.....	15.9	15.8	.....	− 1
Sugar, granulated	Pound	9.1	10.6	10.6	+16	(5)
Tea	do	63.8	69.7	69.8	+ 9	(3)
Coffee	do	30.1	38.5	40.5	+35	+ 5
Prunes	do	16.5	21.9	23.2	+41	+ 6
Raisins	do	15.1	16.3	16.5	+ 9	+ 1
Bananas	Dozen	.....	37.6	38.8	.....	+ 3
Oranges	do	.....	55.5	54.1	.....	− 3
22 weighted articles combined		.....	.....	.....	+17	+ 2

[1] Decrease of less than five-tenths of 1 per cent.
[2] 15–16 ounce can.
[3] Increase of less than five-tenths of 1 per cent.
[4] Baked weight.
[5] No change in price.

For the six-year period, May 15, 1913, to May 15, 1919, the increase for food as a whole was 91 per cent. Nine articles show an increase of over 100 per cent, namely, lard, 146 per cent; flour, 127 per cent; bacon, 110 per cent; corn meal, 107 per cent; pork chops and potatoes, 106 per cent each; ham and lamb, 104 per cent each; and eggs, 102 per cent.

Other articles increased as follows: Sugar and hens, 96 per cent each; butter, 89 per cent; round steak, 87 per cent; plate beef, 86 per cent; chuck roast, 84 per cent; rib roast, 77 per cent; bread, 75 per cent; sirloin, 73 per cent; and milk, 69 per cent.

AVERAGE RETAIL PRICES AND PER CENT OF INCREASE OR DECREASE IN THE UNITED STATES MAY 15 OF EACH SPECIFIED YEAR COMPARED WITH MAY 15, 1913.

Article.	Unit.	Average retail prices, May 15—							Per cent of increase (+) or decrease (−) May 15 of each specified year compared with May 15, 1913.					
		1913	1914	1915	1916	1917	1918	1919	1914	1915	1916	1917	1918	1919
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*						
Sirloin steak	Pound	25.7	25.9	25.7	27.8	32.2	40.0	44.4	+ 1	(1)	+ 8	+ 25	+ 56	+ 73
Round steak	...do	22.3	23.3	23.0	25.0	29.6	38.0	41.6	+ 4	+ 3	+12	+ 33	+ 70	+ 87
Rib roast	...do	19.9	20.1	19.9	21.6	25.7	31.8	35.2	+ 1	(1)	+ 9	+ 29	+ 60	+ 77
Chuck roast	...do	16.1	17.0	16.3	17.5	21.8	27.8	29.7	+ 6	+ 1	+ 9	+ 35	+ 73	+ 84
Plate beef	...do	12.1	12.5	12.3	13.1	16.6	21.9	22.5	+ 3	+ 2	+ 8	+ 37	+ 81	+ 86
Pork chops	...do	20.9	22.2	20.9	22.9	30.6	36.7	43.0	+ 6	(1)	+10	+ 46	+ 76	+106
Bacon	...do	27.0	26.7	26.4	28.4	41.6	50.5	56.7	− 1	− 2	+ 5	+ 54	+ 87	+110
Ham	...do	26.8	26.8	25.6	31.8	38.8	45.6	54.6	(1)	− 5	+19	+ 45	+ 70	+104
Lamb	...do	19.4	19.8	21.7	23.2	29.7	36.8	39.6	+ 2	+12	+20	+ 53	+ 90	+104
Hens	...do	22.2	22.7	21.5	24.1	29.3	37.9	43.5	+ 2	− 3	+ 9	+ 32	+ 71	+ 96
Salmon, canned	...do	.....	.....	19.8	20.0	25.7	29.6	31.9	.....	.....	.....	.....	.....	.....
Milk, fresh	Quart	8.8	8.9	8.7	8.8	10.5	13.2	14.9	+ 1	− 1	(1)	+ 19	+ 50	+ 69
Milk, evaporated (unsweetened)	(2)	.....	.....	.....	.....	.....	.....	15.1	.....	.....	.....	.....	.....	.....
Butter	Pound	35.9	32.7	34.7	37.0	46.5	51.0	67.9	− 9	− 3	+ 3	+ 30	+ 42	+ 89
Oleomargarine	...do	.....	.....	.....	.....	.....	.....	40.4	.....	.....	.....	.....	.....	.....
Nut margarine	...do	.....	.....	.....	.....	.....	.....	35.3	.....	.....	.....	.....	.....	.....
Cheese	...do	.....	.....	23.5	24.8	33.8	33.4	42.2	.....	.....	.....	.....	.....	.....
Lard	...do	15.8	15.6	15.1	20.1	27.8	32.9	38.8	− 1	− 4	+27	+ 76	+108	+146
Crisco	...do	.....	.....	.....	.....	.....	.....	33.9	.....	.....	.....	.....	.....	.....
Eggs, strictly fresh	Dozen	26.3	26.6	26.3	28.1	39.8	42.4	53.1	+ 1	(1)	+ 7	+ 51	+ 61	+102
Bread	Pound [3]	5.6	6.2	7.2	7.0	9.6	9.8	9.8	+11	+29	+25	+ 71	+ 75	+ 75
Flour	Pound	3.3	3.3	4.5	3.9	8.7	6.6	7.5	(1)	+36	+18	+164	+100	+127
Corn meal	...do	3.0	3.1	3.3	3.3	5.4	7.0	6.2	+ 3	+10	+10	+ 80	+133	+107
Rolled oats	Pound	.....	.....	.....	.....	.....	.....	8.4	.....	.....	.....	.....	.....	.....
Corn flakes	(4)	.....	.....	.....	.....	.....	.....	14.1	.....	.....	.....	.....	.....	.....
Cream of Wheat	(5)	.....	.....	.....	.....	.....	.....	25.1	.....	.....	.....	.....	.....	.....
Rice	Pound	.....	.....	9.1	9.1	10.5	12.3	13.4	.....	.....	.....	.....	.....	.....
Macaroni	...do	.....	.....	.....	.....	.....	.....	19.0	.....	.....	.....	.....	.....	.....
Beans, navy	...do	.....	.....	7.6	9.4	19.1	17.8	12.0	.....	.....	.....	.....	.....	.....
Potatoes	...do	1.6	1.9	1.6	2.5	6.1	2.2	3.3	+19	(1)	+56	+281	+ 38	+106
Onions	...do	.....	.....	4.3	5.1	8.6	5.6	10.7	.....	.....	.....	.....	.....	.....
Cabbage	...do	.....	.....	.....	.....	.....	.....	9.6	.....	.....	.....	.....	.....	.....
Beans, baked	No. 2 can	.....	.....	.....	.....	.....	.....	17.5	.....	.....	.....	.....	.....	.....
Corn, canned	...do	.....	.....	.....	.....	.....	.....	19.1	.....	.....	.....	.....	.....	.....
Peas, canned	...do	.....	.....	.....	.....	.....	.....	19.0	.....	.....	.....	.....	.....	.....
Tomatoes, canned	...do	.....	.....	.....	.....	.....	.....	15.8	.....	.....	.....	.....	.....	.....
Sugar, granulated	Pound	5.4	5.0	6.8	8.5	10.0	9.1	10.6	− 7	+26	+57	+ 85	+ 69	+ 96
Tea	...do	.....	.....	54.6	54.6	55.7	63.8	69.8	.....	.....	.....	.....	.....	.....
Coffee	...do	.....	.....	27.9	29.9	30.2	30.1	40.5	.....	.....	.....	.....	.....	.....
Prunes	...do	.....	.....	13.7	13.3	15.3	16.5	23.2	.....	.....	.....	.....	.....	.....
Raisins	...do	.....	.....	12.5	12.6	14.4	15.1	16.5	.....	.....	.....	.....	.....	.....
Bananas	Dozen	.....	.....	.....	.....	.....	.....	38.8	.....	.....	.....	.....	.....	.....
Oranges	...do	.....	.....	.....	.....	.....	.....	54.1	.....	.....	.....	.....	.....	.....
All articles combined	.....	.....	.....	.....	.....	.....	.....	.....	+ 1	+ 3	+13	+ 56	+ 64	+ 91

[1] No change in price.
[2] 15–16 ounce can.
[3] Baked weight.
[4] 8-ounce package.
[5] 28-ounce package.

RELATIVE RETAIL PRICES OF FOOD IN THE UNITED STATES ON APR. 15 AND MAY 15, 1919, AND MAY 15, 1913, 1914, 1915, 1916, 1917, AND 1918.

[The relative price is the per cent that the average price on the 15th of each month is of the average price for the year 1913.]

Article.	Unit.	1919		May 15—					
		Apr. 15.	May 15.	1913	1914	1915	1916	1917	1918
Sirloin steak	Pound	172	175	101	102	101	109	127	157
Round steak	do	182	187	100	105	103	112	133	170
Rib roast	do	175	178	101	102	101	110	130	161
Chuck roast	do	184	186	101	103	101	109	134	174
Plate beef	do	188	188	101	104	102	108	136	183
Pork chops	do	197	205	100	106	99	109	146	175
Bacon	do	212	210	100	99	98	105	155	187
Ham	do	197	203	99	99	95	118	144	170
Lard	do	223	246	100	98	96	127	176	208
Hens	do	202	204	104	106	101	113	138	178
Eggs, strictly fresh	Dozen	143	154	76	77	76	82	116	123
Butter	Pound	186	177	94	85	91	97	122	133
Milk	Quart	169	167	99	100	99	99	117	148
Bread	Pound	172	172	100	110	128	124	170	174
Flour	do	218	227	101	99	139	119	266	200
Corn meal	do	200	207	98	103	109	108	178	233
Potatoes	do	182	194	91	112	89	140	352	129
Sugar	do	193	193	97	91	124	156	183	165
All articles combined		182	185	97	98	100	109	151	158

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD ON

[The prices shown in the tables following are computed from reports sent monthly to the bureau by retail

Article.	Unit.	Atlanta, Ga.						Baltimore, Md.					
		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919	
						Apr.	May.					Apr.	May.
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Lb..	24.0	25.3	29.9	36.9	40.4	40.9	23.3	24.4	32.6	40.9	46.1	45.8
Round steak	Lb..	21.0	22.1	27.5	34.4	37.4	38.3	22.0	22.4	30.2	40.2	44.7	44.3
Rib roast	Lb..	19.1	19.6	23.7	27.9	32.4	31.0	18.7	18.0	24.6	32.7	36.6	36.5
Chuck roast	Lb..	14.9	15.5	19.4	23.4	26.9	26.3	15.7	15.6	22.0	28.1	31.7	31.0
Plate beef	Lb..	10.8	9.9	15.9	20.8	22.9	21.4	12.8	13.1	18.2	22.7	25.7	24.3
Pork chops	Lb..	22.5	23.4	30.1	37.5	39.6	41.3	18.3	19.6	29.0	38.6	40.7	42.1
Bacon, sliced	Lb..	31.0	31.0	40.7	51.9	59.2	59.8	23.3	23.8	37.8	46.2	50.2	51.4
Ham, sliced	Lb..	29.0	29.3	39.0	46.3	54.4	54.8	31.0	30.0	42.5	49.1	57.2	58.2
Lamb	Lb..	20.0	19.9	29.8	37.5	41.3	40.7	18.0	18.8	31.3	38.8	42.1	42.7
Hens	Lb..	19.6	22.0	23.9	33.0	39.6	37.4	22.6	21.8	29.8	39.8	46.7	47.0
Salmon, canned	Lb..	.....	.....	21.8	24.4	26.4	25.9	.....	.....	21.3	26.0	29.0	28.8
Milk, fresh	Qt..	10.0	10.0	14.1	18.7	20.0	20.0	8.8	8.7	11.0	13.0	14.3	14.0
Milk, evaporated (unsweetened)	(2)	.....	.....	.....	.....	15.7	16.1	.....	.....	.....	.....	14.8	14.9
Butter	Lb..	39.3	34.1	49.0	56.3	73.4	70.8	38.6	34.9	48.9	54.3	74.7	73.5
Oleomargarine	Lb..	.....	.....	.....	.....	41.5	43.0	.....	.....	.....	.....	37.0	38.0
Nut margarine	Lb..	.....	.....	.....	.....	39.0	40.4	.....	.....	.....	.....	34.5	35.0
Cheese	Lb..	.....	.....	34.4	34.0	40.6	40.9	.....	.....	35.0	34.6	42.1	42.7
Lard	Lb..	15.5	15.6	27.7	33.9	35.8	39.5	14.3	14.4	26.5	32.1	33.7	37.5
Crisco	Lb..	.....	.....	.....	.....	33.4	33.5	.....	.....	.....	.....	31.8	33.2
Eggs, strictly fresh	Doz.	22.6	25.1	36.4	41.1	42.0	48.5	22.4	23.4	38.4	41.0	47.9	51.4
Bread	Lb.[3]	6.0	5.9	9.8	10.9	10.0	10.0	5.4	5.6	8.8	9.7	9.6	10.0
Flour	Lb..	3.7	3.5	7.9	7.1	7.2	7.4	12.7	3.2	8.6	6.7	7.3	7.7
Corn meal	Lb..	2.5	2.7	4.9	5.7	5.5	5.5	2.4	2.5	5.4	6.5	5.4	5.5
Rolled oats	Lb..	.....	.....	.....	.....	.....	9.9	.....	.....	.....	.....	.....	7.3
Corn flakes	(4)	.....	.....	.....	.....	14.2	14.1	.....	.....	.....	.....	13.1	13.1
Cream of Wheat	(5)	.....	.....	.....	.....	24.9	25.2	.....	.....	.....	.....	23.2	23.7
Macaroni	Lb..	.....	.....	.....	.....	.....	21.9	.....	.....	.....	.....	.....	16.5
Rice	Lb..	.....	.....	9.9	12.2	12.8	13.1	.....	.....	10.0	12.0	13.1	13.1
Beans, navy	Lb..	.....	.....	18.6	18.6	14.2	14.4	.....	.....	18.4	18.1	12.6	12.6
Potatoes	Lb..	2.0	2.9	6.6	3.4	4.1	4.4	1.9	1.9	6.4	2.1	3.0	3.5
Onions	Lb..	.....	.....	11.1	6.1	8.9	12.5	.....	.....	8.2	4.7	6.3	11.0
Cabbage	Lb..	.....	.....	.....	.....	9.9	10.2	.....	.....	.....	.....	10.5	9.6
Beans, baked	(6)	.....	.....	.....	.....	17.4	17.4	.....	.....	.....	.....	15.9	15.1
Corn, canned	(6)	.....	.....	.....	.....	20.0	19.3	.....	.....	.....	.....	18.8	18.9
Peas, canned	(6)	.....	.....	.....	.....	18.9	20.1	.....	.....	.....	.....	18.3	18.5
Tomatoes, canned	(6)	.....	.....	.....	.....	13.3	13.8	.....	.....	.....	.....	14.5	14.6
Sugar, granulated	Lb..	5.3	5.0	11.3	9.3	10.9	11.0	4.5	4.3	9.1	8.5	10.1	10.1
Tea	Lb..	.....	.....	74.3	83.2	88.2	88.0	.....	.....	55.0	66.3	72.5	72.8
Coffee	Lb..	.....	.....	29.9	28.9	36.6	39.7	.....	.....	23.5	28.5	36.5	37.9
Prunes	Lb..	.....	.....	16.8	18.0	20.6	20.8	.....	.....	14.5	16.6	21.9	24.1
Raisins	Lb..	.....	.....	15.3	17.4	17.4	16.8	.....	.....	14.3	15.1	16.0	16.3
Bananas	Doz.	.....	.....	.....	.....	29.7	30.9	.....	.....	.....	.....	30.0	31.7
Oranges	Doz.	.....	.....	.....	.....	55.8	55.4	.....	.....	.....	.....	56.4	58.0

[1] The steak for which prices are here quoted is known as "porterhouse" in most of the cities included in this report, but in this city it is called "sirloin" steak.
[2] 15–16-ounce can.

MAY 15, 1913, 1914, 1917, 1918, 1919, AND APR. 15, 1919, FOR 19 CITIES.

dealers. As some dealers occasionally fail to report, the number of quotations varies from month to month.]

Birmingham, Ala.						Boston, Mass.						Buffalo, N. Y.					
May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919	
				Apr.	May.					Apr.	May.					Apr.	May.
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
26.8	29.0	33.0	42.1	44.3	45.4	[1] 37.0	[1] 34.7	[1] 41.5	[1] 49.2	[1] 60.1	[1] 62.7	22.3	22.8	30.5	37.3	39.4	40.2
22.5	23.5	30.5	39.3	41.5	42.7	34.0	34.3	40.9	50.5	57.5	59.4	19.3	19.8	28.2	35.1	36.9	37.7
19.9	21.0	26.5	32.1	35.6	36.6	24.4	24.7	29.3	34.2	41.6	42.1	17.5	17.2	24.2	29.9	32.1	33.1
16.8	17.5	22.9	27.5	31.0	31.3	17.0	16.8	24.8	30.2	31.5	33.1	15.3	15.6	21.4	27.3	28.4	28.9
10.5	13.0	18.2	19.7	23.9	23.5	.....	.....	.....	.....	.....	.....	11.8	12.5	16.3	21.1	21.9	22.0
20.8	23.4	30.6	34.5	39.9	41.2	23.4	23.0	31.7	36.0	42.8	44.7	19.8	22.2	31.9	38.0	42.1	44.5
33.1	34.0	45.0	53.8	62.6	62.4	25.4	25.0	40.8	47.2	51.0	52.9	22.0	21.2	41.5	47.5	47.7	49.0
30.0	33.0	42.0	45.6	53.7	55.4	31.8	30.0	42.5	46.9	56.4	56.7	25.7	26.3	39.3	46.3	51.3	53.7
21.7	22.0	31.0	35.0	46.4	44.5	23.5	22.7	31.4	36.9	41.3	41.7	18.7	18.0	28.1	33.9	36.1	34.7
18.0	19.5	22.6	32.8	38.6	37.9	25.6	25.8	32.0	41.1	43.7	45.4	22.5	22.4	31.0	39.2	43.6	42.4
.....	.....	25.0	26.4	32.6	33.0	.....	.....	28.0	31.0	32.3	31.3	.....	.....	24.1	28.1	28.7	28.7
10.3	10.0	12.8	15.5	20.0	20.0	8.9	8.9	11.0	14.5	15.5	15.5	8.0	8.0	11.0	13.0	14.0	15.0
.....	.....	.....	.....	16.8	16.5	.....	.....	.....	.....	15.4	15.6	.....	.....	.....	.....	14.5	14.5
41.0	37.5	50.8	53.3	76.7	73.9	36.0	33.3	47.5	51.0	72.3	68.4	34.1	31.0	44.6	50.6	70.9	66.2
.....	.....	.....	.....	41.2	43.5	.....	.....	.....	.....	40.1	40.8	.....	.....	.....	.....	39.2	39.3
.....	.....	.....	.....	40.0	39.0	.....	.....	.....	.....	34.6	35.9	.....	.....	.....	.....	33.4	33.4
.....	.....	34.2	33.4	42.9	42.6	.....	.....	33.3	33.1	42.8	42.1	.....	.....	32.1	31.8	40.0	40.5
15.8	15.8	27.7	31.8	35.0	39.4	16.0	15.6	27.9	33.1	36.4	40.0	14.3	13.9	26.8	31.2	34.2	38.9
.....	.....	.....	.....	33.1	33.8	.....	.....	.....	.....	33.4	33.8	.....	.....	.....	.....	31.1	31.9
23.8	25.0	36.7	38.3	46.3	48.8	32.1	32.5	48.7	52.4	60.6	66.8	25.4	26.0	40.9	43.4	49.4	53.9
5.3	5.6	10.9	10.0	9.7	9.7	5.9	5.9	9.1	9.1	9.2	9.5	5.6	5.0	9.6	10.2	9.5	9.7
3.8	3.7	8.5	7.0	7.4	7.7	3.7	3.8	9.3	6.8	7.6	8.1	3.0	3.0	8.8	6.2	6.6	7.3
2.2	2.5	4.9	5.5	5.2	5.4	3.6	3.5	6.5	7.8	6.6	6.8	2.5	2.8	5.7	7.2	5.5	5.5
.....	.....	.....	.....	.....	10.6	.....	.....	.....	.....	.....	7.4	.....	.....	.....	.....	.....	7.0
.....	.....	.....	.....	14.7	14.7	.....	.....	.....	.....	13.7	13.8	.....	.....	.....	.....	12.7	12.9
.....	.....	.....	.....	25.3	25.3	.....	.....	.....	.....	24.8	24.8	.....	.....	.....	.....	24.0	24.0
.....	.....	.....	.....	.....	22.0	.....	.....	.....	.....	.....	20.4	.....	.....	.....	.....	.....	20.2
.....	.....	10.0	12.0	13.1	13.2	.....	.....	11.0	12.5	13.8	13.8	.....	.....	10.1	12.3	13.0	13.0
.....	.....	18.0	18.4	14.0	13.6	.....	.....	19.1	17.9	11.7	11.8	.....	.....	19.1	17.9	10.9	10.9
1.9	2.3	6.7	2.5	4.1	4.3	1.8	2.0	6.1	2.5	3.0	3.7	1.4	1.8	6.6	2.1	2.7	3.1
.....	.....	10.0	5.1	8.8	10.5	.....	.....	8.6	5.6	6.9	12.8	.....	.....	8.5	4.8	6.7	10.9
.....	.....	.....	.....	9.4	9.3	.....	.....	.....	.....	11.7	10.7	.....	.....	.....	.....	8.5	10.1
.....	.....	.....	.....	20.1	19.5	.....	.....	.....	.....	18.6	18.3	.....	.....	.....	.....	13.9	13.9
.....	.....	.....	.....	20.2	19.6	.....	.....	.....	.....	21.4	22.1	.....	.....	.....	.....	18.4	18.2
.....	.....	.....	.....	21.8	21.2	.....	.....	.....	.....	21.7	21.6	.....	.....	.....	.....	17.5	17.3
.....	.....	.....	.....	14.0	14.2	.....	.....	.....	.....	17.3	17.4	.....	.....	.....	.....	15.3	15.9
5.2	5.0	11.4	9.2	11.1	11.0	5.2	4.9	9.5	9.3	10.4	10.5	5.3	4.7	9.8	9.0	10.3	10.4
.....	.....	71.0	77.3	86.2	86.3	.....	.....	63.4	64.8	67.4	66.2	.....	.....	51.0	57.6	64.8	66.0
.....	.....	31.7	33.1	40.5	42.7	.....	.....	34.0	34.2	45.1	45.5	.....	.....	28.7	29.9	36.5	39.5
.....	.....	15.0	17.3	22.5	24.8	.....	.....	16.4	17.2	23.5	24.1	.....	.....	14.5	17.2	22.3	24.3
.....	.....	14.7	16.9	17.7	17.6	.....	.....	14.6	15.1	15.8	16.0	.....	.....	13.1	14.0	14.8	14.9
.....	.....	.....	.....	40.6	39.2	.....	.....	.....	.....	43.0	45.8	.....	.....	.....	.....	41.9	42.6
.....	.....	.....	.....	54.7	56.7	.....	.....	.....	.....	55.9	59.1	.....	.....	.....	.....	57.4	58.6

[1] Baked weight.
[4] 8-ounce package.
[5] 28-ounce package.
[6] No. 2 can.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD ON

Article.	Unit.	Chicago, Ill.						Cleveland, Ohio.					
		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919	
						Apr.	May.					Apr.	May.
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Lb..	22.6	24.7	29.3	35.6	39.7	39.5	25.2	26.1	31.5	37.5	39.9	41.4
Round steak	Lb..	19.1	21.5	25.7	32.0	35.7	36.0	22.0	22.9	29.3	35.7	37.5	38.1
Rib roast	Lb..	19.1	20.4	24.4	30.1	34.2	34.1	20.0	19.7	25.0	30.1	32.2	32.8
Chuck roast	Lb..	15.2	16.2	20.9	26.5	29.2	28.7	17.2	17.4	22.7	27.1	29.0	29.7
Plate beef	Lb..	11.3	12.2	16.1	20.3	21.4	21.0	12.1	11.7	16.0	21.0	22.0	21.7
Pork chops	Lb..	18.0	20.8	27.4	33.1	37.9	38.6	21.0	22.9	32.5	35.4	43.3	44.3
Bacon, sliced	Lb..	31.4	31.6	42.7	53.3	58.2	59.7	27.1	27.8	42.7	48.9	55.5	56.3
Ham, sliced	Lb..	32.5	31.7	40.3	48.3	54.6	56.6	36.0	35.0	45.0	47.0	57.1	58.3
Lamb	Lb..	20.3	20.9	31.1	35.0	38.3	38.4	21.0	20.7	30.6	34.9	39.6	38.1
Hens	Lb..	21.2	21.2	28.5	33.9	40.3	41.2	22.9	23.1	31.4	39.8	45.8	45.5
Salmon, canned	Lb..	.....	.....	27.4	30.0	32.5	32.2	.....	.....	25.3	28.5	30.9	30.8
Milk, fresh	Qt..	8.0	8.0	10.0	11.9	13.0	13.0	8.0	8.0	10.0	13.0	13.0	13.0
Milk, evaporated (unsweetened)	[1]	.....	.....	.....	.....	14.0	14.4	.....	.....	.....	.....	15.1	15.2
Butter	Lb..	32.5	29.9	43.1	47.5	67.1	62.4	36.8	34.2	47.2	50.8	72.0	67.7
Oleomargarine	Lb..	.....	.....	.....	.....	36.8	38.9	.....	.....	.....	.....	40.4	42.0
Nut margarine	Lb..	.....	.....	.....	.....	33.4	33.8	.....	.....	.....	.....	35.1	34.8
Cheese	Lb..	.....	.....	33.4	34.3	40.5	42.4	.....	.....	34.3	33.4	42.7	42.9
Lard	Lb..	14.7	15.1	26.3	32.2	34.0	37.6	16.5	16.2	29.7	31.9	36.4	41.0
Crisco	Lb..	.....	.....	.....	.....	32.9	33.3	.....	.....	.....	.....	32.9	33.6
Eggs, strictly fresh	Doz.	23.7	23.5	39.2	39.6	46.6	51.2	25.6	25.3	43.7	42.4	51.0	54.8
Bread	Lb.[2]	6.1	6.1	9.6	10.2	10.0	10.0	5.5	5.6	10.1	10.0	9.7	9.7
Flour	Lb..	2.8	2.9	8.2	6.4	6.8	7.4	3.2	3.2	9.2	6.7	7.3	7.8
Corn meal	Lb..	2.9	2.8	5.7	7.1	5.8	5.8	2.7	2.9	5.3	7.1	5.9	5.8
Rolled oats	Lb..	.....	.....	.....	.....	.....	6.5	.....	.....	.....	.....	.....	8.2
Corn flakes	[3]	.....	.....	.....	.....	12.6	12.5	.....	.....	.....	.....	13.7	13.6
Cream of Wheat	[4]	.....	.....	.....	.....	23.9	23.9	.....	.....	.....	.....	24.9	24.4
Macaroni	Lb..	.....	.....	.....	.....	.....	18.8	.....	.....	.....	.....	.....	18.8
Rice	Lb..	.....	.....	10.2	12.6	13.3	13.6	.....	.....	10.6	12.1	13.3	13.3
Beans, navy	Lb..	.....	.....	19.6	17.7	11.2	11.3	.....	.....	21.3	17.3	11.3	11.6
Potatoes	Lb..	1.3	1.6	5.6	1.8	2.5	2.8	1.5	1.9	7.1	2.0	3.1	3.2
Onions	Lb..	.....	.....	7.0	3.7	5.9	10.8	.....	.....	7.8	4.6	7.6	11.4
Cabbage	Lb..	.....	.....	.....	.....	9.0	9.1	.....	.....	.....	.....	10.2	10.2
Beans, baked	[5]	.....	.....	.....	.....	16.4	16.3	.....	.....	.....	.....	16.6	16.3
Corn, canned	[5]	.....	.....	.....	.....	17.7	17.8	.....	.....	.....	.....	20.1	19.6
Peas, canned	[5]	.....	.....	.....	.....	17.3	17.5	.....	.....	.....	.....	19.1	19.2
Tomatoes, canned	[5]	.....	.....	.....	.....	16.4	16.1	.....	.....	.....	.....	16.4	15.8
Sugar, granulated	Lb..	4.9	4.9	9.9	8.7	9.9	10.0	5.1	5.0	10.2	9.0	10.8	10.8
Tea	Lb..	.....	.....	53.7	58.4	62.0	62.8	.....	.....	49.2	59.6	66.5	66.3
Coffee	Lb..	.....	.....	28.9	29.1	35.7	36.9	.....	.....	28.8	29.9	38.8	41.3
Prunes	Lb..	.....	.....	15.5	16.7	22.3	24.5	.....	.....	16.4	16.8	22.9	23.5
Raisins	Lb..	.....	.....	14.7	14.9	16.7	16.6	.....	.....	13.9	14.2	15.7	16.2
Bananas	Doz.	.....	.....	.....	.....	35.1	35.8	.....	.....	.....	.....	43.7	45.2
Oranges	Doz.	.....	.....	.....	.....	49.9	51.4	.....	.....	.....	.....	55.2	54.0

[1] 15–16 ounce can. [2] Baked weight. [3] 8-ounce package.

MAY 15, 1913, 1914, 1917, 1918, 1919, AND APR. 15, 1919, FOR 19 CITIES—Continued.

Denver, Colo.						Detroit, Mich.						Los Angeles, Calif.					
May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919	
				Apr.	May.					Apr.	May.					Apr.	May.
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
23.9	22.9	30.4	39.5	40.8	41.2	23.8	25.1	28.2	37.7	40.6	42.3	24.0	23.3	27.7	33.6	35.9	35.7
21.8	21.0	28.0	38.2	38.6	38.9	19.4	21.6	24.8	34.8	36.5	38.3	20.8	21.3	25.4	31.6	32.6	32.3
17.8	16.7	23.3	30.3	31.3	31.8	19.2	20.0	25.4	31.8	33.1	34.5	19.1	19.8	23.2	28.2	31.6	30.9
15.8	16.1	20.3	28.2	28.1	28.2	15.0	16.3	19.0	27.0	27.8	28.6	15.5	16.6	19.3	24.3	25.0	24.8
19.4	9.7	14.4	20.0	19.3	19.4	11.5	11.6	15.2	21.1	21.3	22.0	12.4	13.5	15.8	20.5	21.0	20.5
20.3	21.0	30.3	35.5	40.7	41.8	19.2	21.0	26.8	34.8	40.9	42.5	25.4	26.0	32.0	41.3	45.8	45.6
28.0	27.4	44.7	53.2	60.0	60.2	23.5	23.3	38.8	48.5	53.4	55.3	33.8	33.5	46.4	58.4	65.8	66.5
30.0	29.2	44.5	50.5	58.8	58.9	25.0	28.0	35.0	46.2	55.8	57.7	35.0	34.8	47.2	55.5	62.6	63.6
17.9	17.7	29.0	36.1	34.3	34.1	17.8	19.0	26.8	38.2	40.3	40.5	19.2	19.1	24.8	33.5	34.5	33.4
21.6	20.9	29.4	37.3	38.5	40.0	22.4	22.8	30.0	38.6	43.4	41.9	25.8	28.1	26.9	38.3	46.5	47.7
.....	.....	24.3	28.3	32.3	32.4	.....	.....	24.3	29.7	31.3	31.5	.....	.....	32.7	37.7	40.6	40.9
8.4	8.4	8.8	12.0	12.6	12.8	8.0	8.0	11.0	12.0	15.0	15.0	10.0	10.0	10.0	13.0	14.0	14.0
.....	.....	.....	.....	14.0	14.7	.....	.....	.....	.....	14.7	14.8	.....	.....	.....	.....	13.4	13.4
34.3	30.0	44.1	47.0	67.8	64.2	34.7	30.9	43.4	49.9	69.9	66.1	35.0	33.5	40.9	45.2	60.2	65.6
.....	.....	.....	.....	39.4	39.2	.....	.....	.....	.....	38.6	39.8	.....	.....	.....	.....	40.7	42.3
.....	.....	.....	.....	35.1	35.4	.....	.....	.....	.....	34.5	34.2	.....	.....	.....	.....	35.5	35.2
.....	.....	34.6	35.2	42.3	43.3	.....	.....	31.0	31.8	40.3	40.6	.....	.....	32.4	33.8	44.2	44.9
16.3	15.8	28.8	34.6	36.7	39.7	16.1	15.7	26.0	33.2	35.3	39.4	17.9	17.7	27.0	33.9	34.1	36.4
.....	.....	.....	.....	33.1	33.2	.....	.....	.....	.....	32.8	33.0	.....	.....	.....	.....	33.7	35.0
23.6	24.6	40.1	41.6	45.9	49.6	25.0	23.6	33.4	42.9	49.1	53.2	27.5	30.0	36.9	44.4	52.0	57.7
5.4	5.4	9.9	12.0	11.3	11.5	5.6	5.6	9.9	9.7	10.3	10.4	6.2	6.0	9.8	9.1	8.9	9.3
2.6	2.6	7.3	5.6	6.1	6.3	3.1	3.1	8.8	6.8	6.9	7.4	3.6	3.6	8.5	6.6	7.4	7.6
2.4	2.5	4.7	6.0	5.5	5.9	2.8	2.9	5.5	7.2	6.0	6.4	3.2	3.5	6.4	7.4	7.0	7.3
.....	.....	.....	.....	.....	8.5	.....	.....	.....	.....	.....	7.6	.....	.....	.....	.....	.....	9.0
.....	.....	.....	.....	14.6	14.6	.....	.....	.....	.....	14.3	14.3	.....	.....	.....	.....	14.0	13.8
.....	.....	.....	.....	25.1	25.0	.....	.....	.....	.....	24.7	24.9	.....	.....	.....	.....	24.8	24.6
.....	.....	.....	.....	.....	18.8	.....	.....	.....	.....	.....	19.3	.....	.....	.....	.....	.....	16.7
.....	.....	10.2	13.1	14.2	13.9	.....	.....	9.6	12.6	13.2	13.3	.....	.....	10.3	12.5	13.6	14.0
.....	.....	19.0	17.1	12.8	11.9	.....	.....	20.5	16.8	11.3	11.1	.....	.....	19.1	17.0	10.9	10.7
1.2	1.7	6.1	1.8	2.9	2.9	1.3	1.6	5.9	1.6	2.5	2.8	1.1	2.0	5.3	2.0	3.9	3.9
.....	.....	8.8	2.9	6.5	9.9	.....	.....	8.6	4.7	6.2	11.7	.....	.....	6.5	2.8	6.5	7.6
.....	.....	.....	.....	7.0	8.5	.....	.....	.....	.....	9.2	10.5	.....	.....	.....	.....	5.2	5.1
.....	.....	.....	.....	19.4	18.9	.....	.....	.....	.....	16.3	16.2	.....	.....	.....	.....	19.7	19.5
.....	.....	.....	.....	19.0	18.0	.....	.....	.....	.....	19.5	19.6	.....	.....	.....	.....	19.1	18.9
.....	.....	.....	.....	19.6	19.4	.....	.....	.....	.....	18.8	18.5	.....	.....	.....	.....	18.9	18.9
.....	.....	.....	.....	15.4	14.8	.....	.....	.....	.....	16.7	16.9	.....	.....	.....	.....	15.8	15.4
5.3	4.8	9.3	9.2	11.2	11.1	4.9	5.0	10.2	8.9	10.4	10.4	5.3	4.9	8.8	8.6	10.4	10.5
.....	.....	57.7	60.6	68.4	68.9	.....	.....	45.0	58.5	60.0	60.6	.....	.....	54.5	61.6	70.4	70.8
.....	.....	30.8	30.4	40.0	40.6	.....	.....	27.8	30.4	37.8	40.2	.....	.....	30.4	30.3	38.9	39.3
.....	.....	16.2	16.8	22.7	23.6	.....	.....	13.3	16.9	21.8	23.8	.....	.....	16.4	16.0	22.6	23.8
.....	.....	14.5	14.6	17.4	17.4	.....	.....	12.8	14.5	16.3	16.3	.....	.....	12.4	14.7	15.9	16.4
.....	.....	.....	.....	44.7	45.6	.....	.....	.....	.....	30.6	32.7	.....	.....	.....	.....	39.2	41.3
.....	.....	.....	.....	55.1	52.1	.....	.....	.....	.....	54.1	54.8	.....	.....	.....	.....	37.1	39.3

[4] 28-ounce package.

[5] No. 2 can.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD ON

Article.	Unit.	Milwaukee, Wis.						New Orleans, La.					
		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919	
						Apr.	May.					Apr.	May.
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Lb..	22.0	23.3	29.6	35.6	39.3	40.1	22.0	23.5	28.7	34.1	37.6	36.5
Round steak	Lb..	20.5	21.3	27.4	34.0	37.1	37.7	19.0	20.4	24.6	30.9	34.2	33.5
Rib roast	Lb..	18.5	18.5	24.2	29.1	32.8	33.4	20.0	21.1	21.7	30.2	32.9	32.7
Chuck roast	Lb..	16.5	16.3	22.4	26.9	29.7	30.1	15.5	15.4	19.1	24.1	26.2	26.8
Plate beef	Lb..	11.5	11.8	16.0	20.8	22.5	22.4	11.1	12.4	15.6	18.9	22.2	21.4
Pork chops	Lb..	19.5	21.0	28.8	33.5	38.3	40.1	22.5	23.9	30.8	37.5	44.3	43.9
Bacon, sliced	Lb..	26.8	27.3	41.8	49.6	55.7	57.1	29.8	30.3	48.1	50.8	60.3	62.0
Ham, sliced	Lb..	27.3	27.7	38.2	45.6	53.2	54.3	26.0	25.0	38.5	43.4	50.4	51.8
Lamb	Lb..	20.0	19.2	32.3	37.6	39.7	39.7	20.1	21.4	30.4	38.6	43.8	43.4
Hens	Lb..	22.0	22.4	30.8	35.1	42.7	42.9	21.1	22.3	28.7	35.7	44.1	42.4
Salmon, canned	Lb..	.....	.....	25.4	27.9	33.0	33.1	.....	.....	26.8	31.1	34.5	36.2
Milk, fresh	Qt..	7.0	7.0	8.0	10.0	12.0	12.0	10.0	9.7	9.6	14.3	16.0	16.5
Milk, evaporated (unsweetened)	(2)..	.....	.....	.....	.....	15.8	15.7	.....	.....	.....	.....	14.9	15.0
Butter	Lb..	33.5	30.6	44.1	47.9	69.1	64.2	35.0	32.0	45.7	50.9	72.6	68.7
Oleomargarine	Lb..	.....	.....	.....	.....	38.3	40.3	.....	.....	.....	.....	39.6	42.4
Nut margarine	Lb..	.....	.....	.....	.....	33.4	33.2	.....	.....	.....	.....	35.6	36.1
Cheese	Lb..	.....	.....	31.6	29.8	39.2	40.0	.....	.....	34.5	31.9	41.9	42.1
Lard	Lb..	15.5	15.9	28.3	32.6	35.8	40.0	14.9	14.8	26.7	32.6	34.3	37.9
Crisco	Lb..	.....	.....	.....	.....	33.5	34.0	.....	.....	.....	.....	34.7	34.1
Eggs, strictly fresh	Doz.	21.3	22.0	37.7	38.4	45.2	49.3	23.6	23.4	36.8	37.1	44.6	45.9
Bread	(3)..	5.5	5.9	8.7	9.2	9.2	9.2	5.2	4.8	9.1	9.5	9.1	9.2
Flour	Lb..	3.1	3.1	9.0	6.6	7.0	7.7	3.8	3.7	8.7	7.2	7.5	7.6
Corn meal	Lb..	3.0	3.3	6.5	7.3	5.7	5.8	2.6	2.8	5.3	6.2	5.1	5.2
Rolled oats	Lb..	.....	.....	.....	.....	.....	7.4	.....	.....	.....	.....	.....	8.3
Corn flakes	(4)..	.....	.....	.....	.....	13.9	14.1	.....	.....	.....	.....	14.1	14.1
Cream of Wheat	(5)..	.....	.....	.....	.....	24.6	24.9	.....	.....	.....	.....	24.8	24.7
Macaroni	Lb..	.....	.....	.....	.....	.....	19.1	.....	.....	.....	.....	.....	11.9
Rice	Lb..	.....	.....	10.7	12.6	14.6	14.6	.....	.....	9.8	11.2	12.1	12.2
Beans, navy	Lb..	.....	.....	20.8	18.1	11.2	11.1	.....	.....	18.2	16.3	11.1	10.8
Potatoes	Lb..	1.1	1.6	6.1	1.7	2.7	3.0	1.9	2.3	6.4	2.0	3.7	4.5
Onions	Lb..	.....	.....	8.6	3.7	5.7	10.5	.....	.....	6.8	2.4	6.7	8.2
Cabbage	Lb..	.....	.....	.....	.....	10.0	10.6	.....	.....	.....	.....	5.3	4.7
Beans, baked	(6)..	.....	.....	.....	.....	16.7	16.5	.....	.....	.....	.....	18.1	17.8
Corn, canned	(6)..	.....	.....	.....	.....	18.7	18.4	.....	.....	.....	.....	17.6	17.6
Peas, canned	(6)..	.....	.....	.....	.....	18.1	17.9	.....	.....	.....	.....	18.6	19.0
Tomatoes, canned	(6)..	.....	.....	.....	.....	16.2	16.7	.....	.....	.....	.....	14.9	14.9
Sugar, granulated	Lb..	5.3	4.9	10.2	8.9	10.6	10.6	5.1	4.7	9.9	8.8	10.3	10.3
Tea	Lb..	.....	.....	56.5	58.4	66.7	66.0	.....	.....	61.0	58.3	66.6	69.8
Coffee	Lb..	.....	.....	28.3	26.5	35.8	38.3	.....	.....	26.4	24.6	34.6	36.6
Prunes	Lb..	.....	.....	16.0	16.0	21.6	22.8	.....	.....	15.1	16.2	21.3	23.7
Raisins	Lb..	.....	.....	15.0	14.9	16.3	16.7	.....	.....	14.8	15.3	16.9	17.4
Bananas	Doz.	.....	.....	.....	.....	37.5	38.6	.....	.....	.....	.....	25.0	25.7
Oranges	Doz.	.....	.....	.....	.....	57.9	54.8	.....	.....	.....	.....	56.0	60.4

[1] The steak for which prices are here quoted is known as "porterhouse" in most of the cities included in this report, but in this city it is called "sirloin" steak.
[2] 15-16-ounce can.

MAY 15, 1913, 1914, 1917, 1918, 1919, AND APR. 15, 1919, FOR 19 CITIES—Continued.

New York, N. Y.						Philadelphia, Pa.						Pittsburg, Pa.					
May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919	
				Apr. 15.	May 15.					Apr. 15.	May 15.					Apr. 15.	May 15.
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
26.3	26.3	32.1	40.0	45.3	45.6	[1]30.0	[1]30.0	[1]36.8	[1]47.4	[1]53.6	[1]54.3	27.0	27.7	34.3	44.5	48.1	48.9
25.0	25.7	32.4	40.6	47.0	46.9	25.6	26.3	33.1	44.3	49.1	49.4	23.3	24.5	30.9	41.3	44.0	44.9
22.3	21.9	27.5	35.1	41.3	40.9	22.3	22.4	27.6	36.0	41.0	41.2	21.8	21.3	26.1	34.0	37.7	38.4
16.3	16.8	22.0	27.8	32.0	32.1	17.6	17.8	23.9	31.9	33.7	33.9	16.5	17.0	23.5	30.7	32.5	32.9
14.5	15.1	19.7	25.7	28.0	28.1	11.8	12.1	15.8	21.7	23.0	22.4	11.9	12.8	16.4	22.7	23.4	23.4
21.8	23.0	32.2	38.2	43.7	45.0	20.8	23.0	31.8	40.0	44.9	47.2	22.0	23.3	32.3	38.5	43.8	44.8
25.3	25.6	40.4	47.0	51.7	52.7	25.6	26.4	40.6	50.0	55.1	56.2	28.8	29.1	42.1	51.5	57.0	59.1
29.0	30.0	43.4	48.8	57.0	58.1	30.8	30.1	44.6	51.7	57.8	59.9	29.4	30.5	43.6	50.0	59.3	62.0
17.6	17.0	27.2	33.6	34.7	33.9	21.4	20.4	30.7	38.1	43.4	43.1	21.2	22.3	33.0	39.5	41.7	42.2
22.2	22.0	30.3	39.7	41.7	42.6	23.0	24.2	31.1	42.4	44.6	46.5	27.3	27.6	35.3	43.3	49.9	48.1
.....	.....	29.2	33.9	37.1	36.6	.....	.....	23.4	26.6	28.5	29.0	.....	.....	25.2	31.2	32.4	32.0
9.0	9.0	10.9	13.0	15.5	15.7	8.0	8.0	9.0	12.0	13.0	13.0	8.6	9.2	10.3	12.5	14.0	14.3
.....	.....	.....	.....	13.7	14.2	.....	.....	.....	.....	14.7	14.8	.....	.....	.....	.....	14.5	14.8
35.4	31.9	45.7	51.8	72.9	67.2	40.3	38.0	52.5	58.0	77.9	73.3	37.2	33.8	47.1	52.4	73.1	68.6
.....	.....	.....	.....	37.5	39.5	.....	.....	.....	.....	40.8	42.3	.....	.....	.....	.....	38.8	40.5
.....	.....	.....	.....	33.5	33.5	.....	.....	.....	.....	36.3	36.5	.....	.....	.....	.....	35.9	34.8
.....	.....	34.0	33.8	42.7	43.1	.....	.....	36.1	37.0	46.5	46.8	.....	.....	33.1	33.9	41.5	41.7
15.7	15.5	27.1	32.6	36.0	38.7	15.3	15.3	27.6	32.9	34.5	38.1	15.5	15.5	27.5	33.4	35.3	39.4
.....	.....	.....	.....	32.3	32.4	.....	.....	.....	.....	31.2	31.8	.....	.....	.....	.....	33.2	33.6
30.8	32.6	45.0	48.0	56.9	59.6	26.1	27.3	41.3	44.4	49.8	54.7	24.1	25.2	40.9	43.7	49.4	54.3
6.0	6.1	9.8	10.0	10.0	8.8	4.8	4.8	8.9	9.5	9.4	9.4	5.4	5.3	10.4	9.8	10.0	10.0
3.2	3.2	9.2	7.1	7.3	7.8	3.1	3.1	8.8	7.1	7.1	7.5	3.1	3.2	8.9	6.7	7.1	7.6
3.4	3.5	6.5	8.0	7.0	6.9	2.7	2.7	4.6	7.2	5.6	5.3	2.7	3.0	5.8	7.5	6.1	6.2
.....	.....	.....	.....	.....	7.5	.....	.....	.....	.....	.....	7.7	.....	.....	.....	.....	.....	8.8
.....	.....	.....	.....	12.0	12.0	.....	.....	.....	.....	12.3	12.3	.....	.....	.....	.....	13.7	13.4
.....	.....	.....	.....	23.9	24.0	.....	.....	.....	.....	24.1	24.2	.....	.....	.....	.....	25.0	25.1
.....	.....	.....	.....	.....	19.7	.....	.....	.....	.....	.....	20.7	.....	.....	.....	.....	.....	18.0
.....	.....	10.0	12.1	13.3	13.2	.....	.....	10.2	13.0	14.4	14.3	.....	.....	10.1	12.4	14.0	14.1
.....	.....	18.9	17.9	12.7	12.4	.....	.....	18.0	17.7	11.7	11.8	.....	.....	20.1	18.4	11.9	11.9
2.5	2.6	7.5	2.8	4.2	4.3	2.3	2.7	7.2	2.6	3.9	4.1	1.6	1.8	6.7	2.3	3.0	3.2
.....	.....	8.5	5.4	7.0	11.6	.....	.....	7.7	5.3	6.5	11.6	.....	.....	8.6	5.4	6.8	12.6
.....	.....	.....	.....	11.7	9.4	.....	.....	.....	.....	11.7	10.5	.....	.....	.....	.....	10.9	11.3
.....	.....	.....	.....	16.0	15.7	.....	.....	.....	.....	14.2	14.3	.....	.....	.....	.....	17.1	17.3
.....	.....	.....	.....	19.3	19.6	.....	.....	.....	.....	19.3	18.4	.....	.....	.....	.....	19.2	19.1
.....	.....	.....	.....	18.3	18.1	.....	.....	.....	.....	18.1	18.4	.....	.....	.....	.....	18.5	18.3
.....	.....	.....	.....	15.1	14.7	.....	.....	.....	.....	13.6	14.3	.....	.....	.....	.....	15.1	15.0
4.8	4.4	9.1	8.8	10.0	9.9	4.9	4.2	8.9	8.7	10.0	10.0	5.5	5.5	10.7	9.6	10.7	10.6
.....	.....	49.2	54.6	54.1	55.0	.....	.....	57.1	59.1	60.9	61.5	.....	.....	64.6	72.7	80.3	78.0
.....	.....	26.3	27.3	35.0	36.7	.....	.....	27.4	27.2	34.3	36.2	.....	.....	28.4	29.4	37.7	40.6
.....	.....	15.7	17.1	23.3	26.9	.....	.....	14.9	16.8	22.6	24.2	.....	.....	14.9	17.4	23.4	24.7
.....	.....	13.9	14.8	15.6	15.9	.....	.....	13.4	14.3	15.0	14.9	.....	.....	14.6	14.1	16.0	15.9
.....	.....	.....	.....	35.7	36.4	.....	.....	.....	.....	35.5	36.0	.....	.....	.....	.....	41.1	42.5
.....	.....	.....	.....	54.7	57.6	.....	.....	.....	.....	58.3	55.3	.....	.....	.....	.....	59.3	58.5

[1] Baked weight.
[4] 8-ounce package.
[5] 28-ounce package.
[6] No. 2 can.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD ON

Article.	Unit.	St. Louis, Mo.						San Francisco, Calif.					
		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919	
						Apr.	May.					Apr.	May.
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Lb.	23.3	26.8	31.2	37.0	41.5	41.3	20.3	20.7	23.2	33.1	32.6	32.3
Round steak	Lb.	21.1	24.2	29.5	36.1	41.0	41.1	19.0	19.7	22.9	32.9	31.7	31.3
Rib roast	Lb.	18.0	20.2	24.7	30.3	33.8	33.9	20.7	21.7	22.4	30.5	30.8	30.4
Chuck roast	Lb.	13.7	15.7	20.5	25.5	27.9	27.7	14.6	15.5	15.9	24.2	24.0	23.1
Plate beef	Lb.	11.0	13.9	15.7	20.9	22.9	23.1	13.3	15.0	15.1	22.4	22.0	21.4
Pork chops	Lb.	19.5	20.2	29.0	33.2	39.6	40.4	24.0	24.7	29.3	39.8	44.2	45.5
Bacon, sliced	Lb.	25.3	25.0	40.0	47.9	54.3	56.0	32.8	33.7	43.2	56.5	61.0	62.8
Ham, sliced	Lb.	26.7	27.5	37.8	47.0	56.2	59.1	30.0	32.0	40.5	50.4	56.1	58.1
Lamb	Lb.	19.0	19.3	31.4	37.9	41.7	39.9	16.7	18.0	23.2	33.6	33.9	33.4
Hens	Lb.	18.5	19.4	26.8	33.0	41.7	40.5	25.2	24.8	26.3	40.6	51.9	51.2
Salmon, canned	Lb.	.....	.....	22.7	29.4	30.6	30.4	.....	.....	23.3	25.8	27.8	27.7
Milk, fresh	Qt.	8.0	8.0	10.0	12.0	13.0	13.3	10.0	10.0	10.0	12.1	14.0	15.2
Milk, evaporated (unsweetened)	(1)	.....	.....	.....	.....	14.4	14.6	.....	.....	.....	.....	13.0	13.1
Butter	Lb.	33.3	31.3	46.5	51.0	72.3	67.3	33.6	31.4	43.4	47.1	62.9	66.3
Oleomargarine	Lb.	.....	.....	.....	.....	37.1	37.7	.....	.....	.....	.....	36.0	35.9
Nut margarine	Lb.	.....	.....	.....	.....	34.6	34.5	.....	.....	.....	.....	36.5	34.5
Cheese	Lb.	.....	.....	31.7	31.1	40.5	40.6	.....	.....	30.1	31.3	40.0	41.2
Lard	Lb.	13.7	12.6	25.4	29.3	34.1	38.6	18.3	17.4	28.2	34.0	34.4	36.2
Crisco	Lb.	.....	.....	.....	37.3	33.3	33.7	.....	.....	.....	.....	34.6	35.5
Eggs, strictly fresh	Doz.	20.0	21.1	37.8	.....	45.7	48.9	24.5	30.0	39.5	43.0	51.7	56.3
Bread	Lb.[2]	5.5	5.6	9.9	10.20	10.0	10.0	5.9	5.9	9.3	10.0	10.0	10.0
Flour	Lb.	3.0	2.9	7.8	6.2	6.9	7.2	3.3	3.4	8.1	6.6	7.1	7.4
Corn meal	Lb.	2.1	2.6	4.7	6.4	5.0	5.2	3.4	3.5	6.5	7.6	6.2	6.5
Rolled oats	Lb.	.....	.....	.....	.....	.....	6.0	.....	.....	.....	.....	.....	7.8
Corn flakes	(3)	.....	.....	.....	.....	14.0	14.0	.....	.....	.....	.....	14.0	14.2
Cream of Wheat	(4)	.....	.....	.....	.....	24.3	24.1	.....	.....	.....	.....	24.7	24.8
Macaroni	Lb.	.....	.....	.....	.....	.....	14.0	.....	.....	.....	.....	.....	.....
Rice	Lb.	.....	.....	9.2	12.2	13.2	13.3	.....	.....	10.1	12.4	13.0	13.1
Beans, navy	Lb.	.....	.....	19.7	17.7	11.6	11.1	.....	.....	19.0	16.2	10.0	9.9
Potatoes	Lb.	1.3	1.7	5.8	2.0	2.9	3.0	1.4	2.2	5.4	2.2	3.2	3.2
Onions	Lb.	.....	.....	8.8	4.4	6.4	10.0	.....	.....	8.5	2.3	5.3	5.6
Cabbage	Lb.	.....	.....	.....	.....	8.1	7.7	.....	.....	.....	.....	10.0	.....
Beans, baked	(5)	.....	.....	.....	.....	16.1	16.0	.....	.....	.....	.....	19.9	19.3
Corn, canned	(5)	.....	.....	.....	.....	16.3	16.1	.....	.....	.....	.....	19.2	19.2
Peas, canned	(5)	.....	.....	.....	.....	16.2	16.2	.....	.....	.....	.....	18.1	18.2
Tomatoes, canned	(5)	.....	.....	.....	.....	14.0	14.3	.....	.....	.....	.....	14.3	14.0
Sugar, granulated	Lb.	5.2	4.6	9.8	8.6	10.4	10.4	5.3	4.9	8.7	8.6	10.4	10.3
Tea	Lb.	.....	.....	53.3	67.6	72.4	72.3	.....	.....	51.3	53.5	56.9	56.0
Coffee	Lb.	.....	.....	22.7	27.6	35.7	37.7	.....	.....	30.0	30.2	36.1	37.3
Prunes	Lb.	.....	.....	14.9	16.6	22.0	24.3	.....	.....	13.9	13.7	19.3	21.9
Raisins	Lb.	.....	.....	14.5	16.7	16.4	16.3	.....	.....	13.8	13.6	14.4	15.6
Bananas	Doz.	.....	.....	.....	.....	31.2	32.6	.....	.....	.....	.....	38.9	39.4
Oranges	Doz.	.....	.....	.....	.....	49.5	45.8	.....	.....	.....	.....	53.0	53.6

[1] 15-16 ounce can. [2] Baked weight. [3] 8-ounce package.

MAY 15, 1913, 1914, 1917, 1918, 1919, AND APR. 15, 1919, FOR 19 CITIES—Concluded.

Seattle, Wash.						Washington, D. C.					
May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919		May, 1913.	May, 1914.	May, 1917.	May, 1918.	1919	
				Apr.	May.					Apr.	May.
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
23.8	23.4	27.6	39.1	39.9	40.5	27.5	28.0	33.7	49.2	51.8	52.0
21.5	21.0	26.0	37.5	37.5	37.8	23.6	24.3	31.4	46.6	48.6	48.7
19.6	18.8	24.6	32.0	33.3	33.8	21.9	21.6	27.5	36.5	40.9	41.5
16.8	15.4	20.6	28.1	27.8	27.4	17.6	17.6	23.8	31.5	35.0	35.5
12.9	12.4	15.6	23.2	23.1	23.1	12.1	13.1	17.8	23.1	24.2	23.2
24.6	24.0	33.6	40.0	47.7	48.6	21.1	23.0	32.6	43.9	46.9	47.8
31.7	33.0	48.0	54.8	61.7	63.6	26.5	24.9	40.9	50.3	53.0	55.0
30.8	30.0	40.6	49.5	58.3	58.8	28.0	29.6	42.0	49.4	50.6	58.7
20.8	18.8	28.0	38.9	40.4	40.3	20.9	21.5	32.5	43.3	48.5	47.7
24.5	24.4	28.8	39.6	46.5	46.6	22.4	24.1	30.9	42.0	47.7	48.0
.....	.....	25.0	29.0	31.8	31.3	.....	.....	24.3	29.0	33.6	32.2
8.5	8.6	10.5	12.5	12.0	12.0	8.0	8.0	10.0	14.0	16.0	14.0
.....	.....	.....	.....	13.3	13.7	.....	.....	.....	.....	15.7	15.7
35.0	31.1	43.8	49.4	66.3	65.0	38.7	35.0	48.3	55.2	76.7	74.3
.....	.....	.....	.....	40.8	40.5	.....	.....	.....	.....	38.4	39.5
.....	.....	.....	.....	36.8	36.2	.....	.....	.....	.....	35.8	35.6
.....	.....	31.8	31.0	43.2	43.6	.....	.....	34.3	35.5	42.9	43.5
17.6	15.9	27.9	33.3	34.2	37.7	14.8	14.3	27.5	34.0	35.3	38.3
.....	.....	.....	.....	35.6	35.7	.....	.....	.....	.....	33.3	34.5
25.0	25.4	39.1	45.2	52.0	54.8	23.9	24.7	39.9	43.3	49.4	53.3
5.5	6.0	9.9	10.5	9.8	10.4	5.6	5.5	9.8	9.2	9.9	10.0
3.0	2.9	7.3	5.8	6.6	6.8	3.7	3.7	8.8	6.7	7.3	7.6
3.0	3.1	5.6	7.7	6.9	7.0	2.4	2.5	4.9	6.3	5.4	5.4
.....	.....	.....	.....	.....	8.0	.....	.....	.....	.....	.....	9.6
.....	.....	.....	.....	14.5	14.9	.....	.....	.....	.....	14.0	14.0
.....	.....	.....	.....	27.2	27.1	.....	.....	.....	.....	24.5	24.5
.....	.....	.....	.....	.....	16.3	.....	.....	.....	.....	.....	21.0
.....	.....	9.7	12.9	14.3	14.2	.....	.....	10.5	12.7	14.4	14.6
.....	.....	20.3	17.6	11.1	10.8	.....	.....	20.0	19.2	13.5	13.2
1.0	1.3	4.6	1.7	2.4	2.6	2.1	1.8	7.1	2.3	2.9	3.2
.....	.....	8.9	3.3	6.4	7.2	.....	.....	8.4	5.6	7.1	12.8
.....	.....	.....	.....	8.0	8.9	.....	.....	.....	.....	12.7	10.8
.....	.....	.....	.....	22.7	22.4	.....	.....	.....	.....	15.9	15.5
.....	.....	.....	.....	21.3	20.6	.....	.....	.....	.....	19.5	20.1
.....	.....	.....	.....	20.4	19.6	.....	.....	.....	.....	19.9	20.0
.....	.....	.....	.....	18.5	17.5	.....	.....	.....	.....	17.5	16.2
5.9	5.3	9.3	9.1	10.8	10.8	4.9	4.7	9.4	8.9	10.2	10.2
.....	.....	50.0	58.3	63.3	62.8	.....	.....	57.6	67.1	77.1	79.1
.....	.....	32.6	32.2	39.3	40.0	.....	.....	28.8	29.6	37.7	39.4
.....	.....	13.4	15.2	19.7	20.2	.....	.....	15.8	17.6	23.1	23.3
.....	.....	13.1	14.2	16.7	17.2	.....	.....	13.4	15.3	15.6	15.8
.....	.....	.....	.....	49.1	50.0	.....	.....	.....	.....	41.8	43.5
.....	.....	.....	.....	58.1	59.6	.....	.....	.....	.....	59.4	61.2

[4] 28-ounce package.

[5] No. 2 can.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF

Article.	Unit.	Bridgeport, Conn.		Butte, Mont.		Charleston, S. C.		Cincinnati, Ohio.		Columbus, Ohio.	
		Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Lb..	52.0	52.1	38.3	39.5	40.7	40.8	38.3	39.0	40.6	42.5
Round steak	Lb..	50.0	49.8	35.7	36.8	40.7	40.3	37.1	37.7	38.8	40.8
Rib roast	Lb..	39.8	39.6	31.4	32.3	34.3	34.9	33.1	33.7	35.6	36.2
Chuck roast	Lb..	33.1	32.7	26.3	26.5	28.7	28.8	26.9	26.7	30.6	31.2
Plate beef	Lb..	21.0	20.5	19.7	19.7	22.7	22.2	23.7	24.0	23.7	24.6
Pork chops	Lb..	42.2	43.8	40.6	41.0	42.4	44.7	40.2	40.7	39.0	40.3
Bacon, sliced	Lb..	57.6	58.2	58.6	63.1	55.9	58.1	52.6	53.0	53.3	54.7
Ham, sliced	Lb..	60.9	61.2	54.6	58.7	53.8	55.0	53.9	54.3	56.2	56.6
Lamb	Lb..	40.5	40.1	35.0	37.4	43.2	40.8	37.1	38.0	43.3	37.5
Hens	Lb..	43.5	44.9	41.0	42.9	48.5	48.8	45.4	44.7	40.6	41.7
Salmon, canned	Lb..	37.6	35.2	40.8	42.8	30.1	30.4	29.2	28.5	30.0	29.2
Milk, fresh	Qt..	15.0	15.0	15.5	15.5	20.3	20.3	14.0	14.0	13.7	14.0
Milk, evaporated (unsweetened)	[2]	15.4	15.5	15.1	15.0	15.0	15.1	14.2	14.5	14.4	14.6
Butter	Lb..	70.9	67.9	71.3	65.4	74.1	72.2	71.4	64.8	70.4	65.8
Oleomargarine	Lb..	38.2	39.4	45.0	.....	41.0	41.5	38.2	40.6	37.7	40.9
Nut margarine	Lb..	35.8	34.3	42.0	.....	50.6	41.0	35.1	35.1	34.9	35.0
Cheese	Lb..	42.8	43.4	41.5	41.6	43.6	42.7	40.6	42.6	40.8	41.2
Lard	Lb..	35.6	39.0	36.4	38.4	34.6	38.4	33.6	37.5	34.3	37.7
Crisco	Lb..	33.2	33.7	36.3	37.1	33.5	33.7	32.0	31.9	32.7	32.9
Eggs, strictly fresh	Doz.	59.4	62.6	52.0	52.3	49.9	52.7	44.4	47.9	42.8	47.2
Bread	Lb.[3]	10.0	10.0	9.9	10.0	10.0	10.7	9.9	9.8	9.6	9.8
Flour	Lb..	7.1	7.5	7.0	7.6	7.5	7.7	7.2	7.6	6.8	7.4
Corn meal	Lb..	6.8	8.3	7.4	7.6	5.0	5.0	5.0	5.0	5.7	5.9
Rolled oats	Lb..	.....	9.2	.....	8.7	.....	9.2	.....	6.7	.....	8.2
Corn flakes	[4]	13.9	13.8	14.6	14.6	14.9	14.9	13.8	13.8	14.2	14.0
Cream of Wheat	[5]	24.1	24.1	29.7	30.0	25.0	25.0	24.9	25.2	25.0	25.0
Rice	Lb..	14.0	13.8	13.2	12.9	12.0	11.9	13.4	13.3	12.8	12.8
Macaroni	Lb..	.....	22.9	.....	19.2	.....	21.4	.....	17.1	.....	18.8
Beans, navy	Lb..	12.4	12.2	11.7	11.6	14.1	13.9	11.0	11.1	10.5	10.5
Potatoes	Lb..	3.2	3.7	1.8	2.2	4.0	4.1	3.2	3.4	2.8	3.2
Onions	Lb..	6.7	12.3	5.0	5.9	8.7	12.5	5.8	9.9	8.3	11.4
Cabbage	Lb..	12.3	10.2	6.2	8.3	9.4	7.2	9.4	10.1	9.5	11.3
Beans, baked	[6]	16.8	16.7	23.9	22.9	15.6	15.3	15.7	15.3	16.4	16.4
Corn, canned	[6]	21.0	21.5	19.3	18.5	21.5	21.2	17.6	17.1	16.0	15.8
Peas, canned	[6]	20.7	20.9	18.5	17.9	21.3	21.3	17.1	17.2	16.7	16.1
Tomatoes, canned	[6]	18.6	16.0	18.3	17.5	15.9	15.9	14.7	14.7	14.2	13.4
Sugar, granulated	Lb..	10.2	10.2	12.0	12.0	10.6	10.4	10.3	10.4	10.6	10.6
Tea	Lb..	63.3	64.4	76.3	76.8	75.5	78.4	74.8	75.8	81.4	81.5
Coffee	Lb..	38.5	39.3	49.3	50.8	38.9	41.2	36.5	37.6	39.5	40.8
Prunes	Lb..	24.5	25.3	20.3	21.6	23.2	24.9	21.8	22.7	21.5	22.3
Raisins	Lb..	16.4	16.2	16.6	17.3	16.4	15.9	16.6	17.1	15.7	15.7
Bananas	Doz.	38.9	37.7	48.9	49.0	40.0	41.8	34.7	35.4	38.2	38.0
Oranges	Doz.	57.3	56.6	52.2	53.7	57.2	61.0	52.3	45.4	54.5	52.2

[1] The steak for which prices are here quoted is known as "sirloin" in most of the cities included in this report, but in this city it is called "rump" steak.
[2] 15-16-ounce can.

FOOD FOR 31 CITIES ON APR. 15 AND MAY 15, 1919.

Dallas, Tex.		Fall River, Mass.		Houston, Tex.		Indianapolis, Ind.		Jacksonville, Fla.		Kansas City, Mo.	
Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
42.2	42.2	[1] 58.9	[1] 60.3	40.0	38.7	39.8	41.2	42.7	43.0	40.2	40.8
41.6	40.8	48.8	50.6	39.7	38.7	39.4	40.6	39.3	40.0	37.8	38.1
35.0	35.0	36.2	37.6	32.0	32.5	29.7	29.7	33.2	34.1	30.4	30.8
31.8	31.8	30.3	30.9	28.7	29.5	27.9	28.6	28.1	28.1	25.9	26.3
27.3	26.4	.....	.....	24.8	26.1	22.2	23.1	22.1	22.4	20.8	21.0
41.0	41.7	40.1	41.6	39.0	40.5	40.7	42.4	39.7	42.3	38.1	39.3
62.1	62.1	51.7	51.8	65.5	61.0	54.5	54.9	56.2	56.7	58.7	58.8
56.4	59.0	53.9	54.1	51.7	50.6	57.4	58.4	55.3	55.9	54.1	56.2
46.7	43.9	40.5	39.1	38.8	40.0	44.6	45.8	37.2	38.6	35.2	34.3
37.7	37.8	44.3	45.8	43.5	43.3	38.0	39.0	40.9	41.0	40.0	39.0
31.8	31.6	30.2	29.9	29.6	31.4	26.9	26.7	32.8	31.7	31.9	32.9
18.0	18.0	15.3	15.0	18.4	17.5	12.5	12.7	18.0	18.0	15.0	15.0
15.7	16.0	15.3	15.7	15.5	15.7	14.9	15.4	15.4	15.3	15.3	15.3
68.2	62.3	71.3	68.7	68.7	67.0	68.8	63.8	76.4	71.5	69.2	66.6
36.5	35.9	39.7	39.5	39.9	39.8	38.9	41.5	40.9	40.6	37.1	38.2
36.3	36.4	36.7	36.9	37.4	37.5	34.9	35.4	37.6	35.8	34.9	35.4
42.4	42.8	42.4	42.7	40.7	40.8	42.5	41.9	42.6	42.2	42.2	42.9
36.0	37.3	35.6	39.4	32.1	35.0	35.5	39.8	34.9	37.4	37.6	40.8
33.3	33.6	32.7	33.9	34.9	34.1	33.8	34.4	32.6	33.4	35.6	35.9
44.5	44.0	60.5	63.5	44.3	44.1	44.0	48.4	48.4	49.1	45.6	49.7
10.0	10.0	10.0	10.0	8.9	8.9	9.5	9.5	10.0	10.0	10.0	10.0
7.3	7.4	7.4	7.9	7.4	7.8	7.1	7.6	7.3	7.7	6.8	7.0
6.5	6.7	8.4	8.4	5.8	6.0	5.2	5.3	5.1	5.4	6.5	6.7
.....	9.7	.....	9.5	.....	7.3	.....	8.0	.....	10.4	.....	10.1
14.9	14.6	14.2	14.2	13.9	14.2	14.5	14.5	14.6	14.4	15.0	15.0
25.4	25.5	25.5	25.2	24.7	24.7	25.6	26.2	25.5	25.3	24.6	24.6
12.7	12.9	13.4	13.4	11.8	11.8	13.6	13.7	12.6	12.9	13.0	13.3
.....	19.4	.....	22.2	.....	15.3	.....	20.0	.....	21.8	.....	18.5
13.2	12.7	12.2	12.3	12.0	11.9	11.2	11.6	13.4	13.3	13.0	13.1
3.6	3.8	3.0	3.8	3.5	3.8	2.9	2.9	4.3	4.6	2.9	3.2
7.7	9.2	7.3	12.3	8.0	8.4	6.9	11.1	8.8	9.4	9.2	11.4
7.7	7.6	13.1	11.9	6.0	5.9	10.1	9.9	5.9	5.9	9.6	9.4
20.3	19.8	17.2	17.3	18.3	18.6	18.2	17.8	18.2	18.2	16.4	16.7
19.8	19.4	20.1	19.9	17.7	16.9	18.3	18.2	21.3	20.4	17.3	16.8
20.0	20.0	19.6	19.7	18.8	17.9	18.1	17.8	20.1	20.2	18.3	17.5
15.1	14.7	15.6	15.1	12.8	12.6	15.8	15.5	14.9	14.6	16.1	16.4
11.3	11.3	10.6	10.7	10.8	10.8	11.0	11.0	10.6	10.6	11.1	11.1
81.4	78.4	59.2	57.6	61.3	64.2	83.3	83.3	83.2	85.4	80.5	81.4
42.0	45.5	38.2	41.2	34.1	36.9	39.3	42.3	42.7	44.3	39.0	40.6
22.1	22.7	20.9	21.9	21.8	23.0	22.7	24.1	22.2	23.0	19.6	21.5
16.8	16.6	16.3	16.6	16.4	16.3	18.3	18.9	17.7	18.1	17.8	18.2
36.3	39.2	37.7	40.2	33.0	34.3	29.0	30.4	37.9	38.6	41.7	42.9
51.6	49.6	55.0	53.5	52.0	52.4	48.9	48.6	55.8	63.3	57.3	56.1

[3] Baked weight.
[4] 8-ounce package.
[5] 28-ounce package.
[6] No. 2 can.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD

Article.	Unit.	Little Rock, Ark.		Louisville, Ky.		Manchester, N. H.		Memphis, Tenn.		Minneapolis, Minn.	
		Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Lb.	43.1	41.1	38.5	39.3	[1]55.3	[1]56.0	42.5	42.3	37.2	38.9
Round steak	Lb.	39.6	39.4	27.2	38.1	51.0	51.1	39.6	40.5	34.4	36.7
Rib roast	Lb.	35.8	35.6	32.1	32.2	34.8	34.7	33.8	33.3	31.2	32.4
Chuck roast	Lb.	29.4	28.3	28.5	28.8	31.1	31.2	29.1	29.4	26.0	26.8
Plate beef	Lb.	24.8	24.0	23.8	24.1	.....	.....	24.5	24.0	19.9	20.4
Pork chops	Lb.	42.1	41.6	38.8	40.1	40.3	42.3	39.8	40.7	38.1	40.1
Bacon, sliced	Lb.	59.6	59.4	56.2	57.6	52.2	52.8	60.0	60.0	58.8	58.8
Ham, sliced	Lb.	53.1	55.3	55.7	57.5	52.7	52.9	55.4	56.2	56.3	56.6
Lamb	Lb.	43.8	40.9	40.0	40.8	40.9	39.4	42.5	42.5	35.3	33.8
Hens	Lb.	36.9	37.5	42.6	43.7	44.6	45.8	38.5	39.0	36.6	38.4
Salmon, canned	Lb.	30.8	32.6	29.3	29.3	31.5	31.3	33.7	33.7	36.7	36.9
Milk, fresh	Qt.	16.0	16.0	15.0	15.0	15.0	15.0	18.0	18.0	13.0	12.0
Milk, evaporated (unsweetened)	[2]	15.8	16.2	14.7	14.9	16.2	16.5	16.0	16.2	15.3	15.5
Butter	Lb.	70.8	67.3	73.4	66.3	75.2	73.3	73.9	70.6	66.2	62.0
Oleomargarine	Lb.	39.9	41.0	39.7	41.6	38.2	38.8	41.8	42.4	37.3	39.0
Nut margarine	Lb.	39.0	38.1	35.6	35.0	34.8	34.0	39.8	40.6	31.9	31.6
Cheese	Lb.	43.1	42.1	40.5	41.4	40.2	40.5	40.8	41.9	39.4	39.6
Lard	Lb.	35.0	37.6	34.9	39.2	35.5	39.5	36.3	40.2	35.8	38.9
Crisco	Lb.	34.4	34.5	33.5	34.1	33.5	34.8	33.2	32.9	33.4	33.5
Eggs, strictly fresh	Doz.	42.9	46.5	43.3	48.4	59.6	60.8	44.8	48.5	45.0	48.2
Bread	Lb.	10.0	10.0	10.0	10.0	9.3	9.3	10.0	10.0	9.2	9.2
Flour	Lb.	7.3	7.5	7.4	7.6	7.2	7.8	7.4	7.8	6.9	7.2
Corn meal	Lb.	5.5	5.8	5.3	5.2	7.1	7.1	5.4	5.3	5.7	6.1
Rolled oats	Lb.	.....	10.8	.....	7.4	.....	8.7	.....	9.3	.....	6.2
Corn flakes	[4]	14.8	14.7	13.4	13.7	15.0	14.8	14.3	14.4	14.2	14.3
Cream of Wheat	[5]	25.0	24.9	25.3	25.2	24.9	24.9	24.5	24.5	25.2	25.2
Rice	Lb.	12.5	12.7	13.2	13.3	13.1	13.2	12.2	12.3	13.6	13.5
Macaroni	Lb.	.....	18.0	.....	18.6	.....	23.4	.....	20.2	.....	20.4
Beans, navy	Lb.	13.2	13.3	12.1	12.0	11.7	11.8	12.9	12.9	9.8	10.0
Potatoes	Lb.	3.4	3.6	2.5	3.1	2.8	3.7	3.2	3.4	2.6	2.7
Onions	Lb.	9.1	11.4	8.0	11.0	6.7	10.8	7.9	9.5	6.1	10.9
Cabbage	Lb.	9.1	9.8	9.2	9.7	8.2	12.3	8.1	8.5	6.7	9.8
Beans, baked	[6]	18.3	17.5	16.0	16.8	19.0	19.1	18.6	18.9	19.1	18.8
Corn, canned	[6]	18.2	17.6	17.6	18.0	22.1	21.8	18.5	18.3	16.7	16.7
Peas, canned	[6]	18.8	18.5	18.1	18.8	20.4	20.5	18.0	18.0	16.9	17.6
Tomatoes, canned	[6]	15.0	15.4	15.4	14.9	20.0	15.1	15.5	15.2	16.3	16.6
Sugar, granulated	Lb.	11.1	11.2	10.7	10.7	10.6	10.6	10.9	10.9	10.9	10.7
Tea	Lb.	85.0	86.0	77.6	78.9	60.7	60.4	85.3	84.9	63.1	61.1
Coffee	Lb.	44.8	43.9	37.8	42.0	41.5	42.6	39.2	41.2	39.4	41.7
Prunes	Lb.	19.6	21.3	22.3	21.4	21.7	22.4	24.0	25.2	22.6	25.3
Raisins	Lb.	18.0	18.5	16.5	17.0	16.6	16.8	17.4	17.2	15.8	16.1
Bananas	Doz.	37.5	40.0	37.3	37.9	35.8	37.5	36.5	39.6	40.6	43.9
Oranges	Doz.	56.4	57.2	50.9	47.9	55.3	55.5	54.9	53.5	57.8	58.1

[1] The steak for which prices are here quoted is known as "porterhouse" in most of the cities included in this report, but in this city it is called "sirloin" steak.
[2] 15–16-ounce can.

FOR 31 CITIES ON APR. 15 AND MAY 15, 1919—Continued.

Mobile, Ala.		Newark, N. J.		New Haven, Conn.		Norfolk, Va.		Omaha, Nebr.	
Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
37.9	38.3	48.1	48.2	55.6	56.2	48.0	48.5	43.0	43.6
36.9	38.3	48.8	48.6	50.5	50.8	42.4	43.2	40.4	40.9
32.5	32.5	39.3	39.8	39.8	40.9	38.0	37.1	32.6	32.9
27.9	27.9	33.2	33.1	35.5	35.7	31.9	31.9	28.3	28.3
24.6	24.0	23.6	23.6	.....	.....	24.0	22.0	20.0	21.0
45.0	47.3	43.0	44.7	40.4	42.3	40.8	41.7	38.5	39.4
63.0	61.4	48.9	50.4	56.4	57.4	52.8	54.1	60.0	59.7
55.4	54.6	55.0	55.0	59.3	60.3	50.0	49.4	58.9	58.1
37.9	40.0	41.8	41.2	41.7	42.1	46.1	47.0	40.0	40.5
44.0	44.2	43.3	44.4	44.6	45.7	47.4	47.1	40.3	39.4
31.0	31.2	33.9	34.2	33.5	33.0	32.1	30.5	32.2	31.9
18.3	17.5	15.7	15.5	14.4	14.8	22.7	22.5	13.5	13.5
15.8	16.5	13.9	14.4	15.1	15.0	15.2	15.3	16.1	15.9
74.1	71.9	74.1	68.1	72.3	68.5	75.4	74.1	70.6	65.9
42.1	41.8	39.1	40.2	40.4	41.3	43.5	43.8	40.4	41.4
37.0	39.1	34.7	34.6	35.8	36.2	39.0	38.3	36.2	35.6
41.8	41.6	43.8	43.9	41.9	42.3	43.3	42.3	41.2	40.8
35.4	38.3	35.2	39.0	35.7	39.8	36.5	36.8	37.2	40.3
34.3	33.1	31.1	31.9	33.3	34.1	34.3	33.9	33.9	34.9
47.7	50.4	57.3	60.2	58.9	61.0	48.7	53.3	45.3	49.6
9.6	9.7	9.8	9.8	10.0	10.0	9.9	9.9	10.0	10.0
7.4	7.6	7.3	7.8	7.1	7.6	7.2	7.8	6.8	7.2
5.7	5.9	7.1	7.2	7.2	7.5	5.9	6.2	5.8	6.1
.....	10.7	.....	8.1	.....	8.8	.....	10.1	.....	8.2
14.6	14.7	12.5	12.5	13.8	13.8	14.6	14.5	14.9	14.9
25.3	26.3	23.4	23.4	24.4	24.6	25.7	25.3	25.7	25.2
12.5	12.7	13.7	13.8	13.8	13.7	14.8	14.5	14.0	14.1
.....	19.5	.....	19.9	.....	20.9	.....	21.3	.....	15.4
13.7	13.5	12.6	12.6	13.6	12.9	12.7	12.5	12.9	12.5
4.1	4.2	3.6	3.8	3.1	3.9	3.3	3.7	2.7	3.0
7.4	11.3	7.1	12.8	7.1	13.4	8.5	11.6	7.3	12.3
7.0	7.0	11.3	10.8	11.6	11.3	10.2	8.9	8.2	8.3
18.6	17.6	15.2	15.4	18.2	18.5	15.1	14.5	21.1	20.6
19.3	19.3	20.1	20.4	21.6	21.8	21.8	21.5	17.4	17.0
19.5	19.6	18.6	18.6	21.1	21.7	22.5	22.0	17.9	17.8
15.3	15.1	14.8	14.5	16.5	20.0	15.6	15.5	17.5	17.1
10.9	10.9	10.0	10.1	10.2	10.2	10.4	10.4	10.8	10.9
77.1	76.8	56.4	55.8	63.8	61.2	83.9	82.6	76.8	77.2
36.7	37.3	35.1	38.2	38.8	41.5	40.3	41.8	40.6	44.6
21.1	21.7	23.2	25.1	23.9	26.1	22.5	23.0	22.5	24.4
18.0	18.3	15.4	15.3	16.0	16.5	17.1	16.7	17.1	18.0
29.4	31.2	40.5	39.2	35.0	36.2	39.1	38.9	40.0	42.5
55.0	56.8	59.8	60.6	56.9	57.3	60.5	56.2	56.8	50.3

[3] Baked weight.
[4] 8-ounce package.
[5] 28-ounce package.
[6] No. 2 can.

AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD

Article.	Unit.	Peoria, Ill.		Portland, Me.		Portland, Oreg.		Providence, R. I.	
		Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.
		Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
Sirloin steak	Lb...	38.6	38.7	[1] 64.0	[1] 63.0	35.2	34.9	[1] 66.7	[1] 66.8
Round steak	Lb...	37.6	38.4	53.7	54.7	33.7	33.3	54.1	54.7
Rib roast	Lb...	30.1	29.6	35.2	36.7	31.7	31.4	43.5	43.9
Chuck roast	Lb...	26.7	27.2	30.5	30.4	26.6	25.9	37.8	38.0
Plate beef	Lb...	21.3	21.3	.....	.....	21.3	20.5	.....	.....
Pork chops	Lb...	38.5	39.0	41.1	43.3	43.4	44.7	42.4	45.2
Bacon, sliced	Lb...	58.1	58.9	52.4	52.3	58.5	59.3	52.7	54.0
Ham, sliced	Lb...	56.5	56.9	54.7	54.8	54.7	56.8	60.0	62.0
Lamb	Lb...	40.3	39.4	39.5	39.2	38.7	37.0	44.5	44.4
Hens	Lb...	39.8	40.2	45.5	46.5	45.0	44.0	45.1	46.6
Salmon, canned	Lb...	30.7	30.6	29.3	29.4	36.4	35.2	34.6	34.9
Milk, fresh	Qt...	11.9	11.9	15.3	13.6	14.6	14.6	15.5	15.5
Milk, evaporated (unsweetened)	[2]...	15.3	15.6	15.4	15.9	15.0	15.0	15.4	15.6
Butter	Lb...	68.4	64.2	73.6	72.4	65.8	64.7	73.0	70.1
Oleomargarine	Lb...	39.9	41.9	39.5	41.6	38.8	40.0	36.8	37.5
Nut margarine	Lb...	36.1	36.1	35.6	35.7	35.4	35.3	33.5	33.8
Cheese	Lb...	42.7	43.2	43.7	43.4	43.9	44.2	42.1	43.2
Lard	Lb...	36.0	39.0	37.2	40.6	35.2	37.0	36.0	39.7
Crisco	Lb...	34.4	35.0	34.2	34.2	34.6	34.7	32.8	34.1
Eggs, strictly fresh	Doz..	44.2	48.6	55.9	60.4	50.1	49.6	59.0	64.1
Bread	Lb.[3]..	10.0	10.0	10.0	10.0	9.9	9.9	10.0	10.0
Flour	Lb...	7.4	8.0	7.2	7.7	6.3	6.5	7.6	8.2
Corn meal	Lb...	6.2	6.1	6.4	6.5	7.3	7.3	5.9	5.8
Rolled oats	Lb...	.....	8.7	.....	7.5	.....	8.2	.....	8.6
Corn flakes	(4)...	14.9	14.9	14.1	14.2	14.7	14.6	13.7	13.9
Cream of Wheat	(5)...	26.5	26.8	24.6	24.9	28.2	28.3	24.5	24.7
Rice	Lb...	14.2	14.2	13.6	13.9	13.6	13.8	13.3	13.4
Macaroni	Lb...	.....	15.1	.....	23.1	.....	17.6	.....	20.6
Beans, navy	Lb...	12.4	12.1	11.8	12.5	10.9	10.6	11.8	11.8
Potatoes	Lb...	2.7	2.9	2.9	3.4	2.2	2.3	3.0	3.9
Onions	Lb...	8.0	12.4	7.1	11.8	4.9	5.5	6.6	10.7
Cabbage	Lb...	9.6	9.9	5.9	9.9	6.4	8.4	10.8	11.1
Beans, baked	(6)...	20.0	19.2	22.3	19.3	23.8	23.8	16.8	17.1
Corn, canned	(6)...	17.2	16.6	21.3	21.2	21.0	21.7	20.0	20.3
Peas, canned	(6)...	18.7	18.8	20.7	20.5	21.6	21.1	20.1	20.1
Tomatoes, canned	(6)...	16.0	16.3	20.3	19.3	18.7	18.6	15.9	16.4
Sugar, granulated	Lb...	11.0	11.1	10.3	10.3	10.8	10.6	10.5	10.5
Tea	Lb...	70.0	70.8	63.8	62.8	61.0	60.5	61.7	61.9
Coffee	Lb...	37.0	39.0	39.7	42.0	41.0	42.5	43.9	45.3
Prunes	Lb...	25.3	26.1	20.8	21.8	16.0	17.1	23.9	24.6
Raisins	Lb...	16.5	16.8	15.1	15.1	15.2	15.5	15.4	15.6
Bananas	Doz..	10.1	10.2	38.5	37.5	42.1	43.8	43.3	43.8
Oranges	Doz..	57.4	53.3	64.3	62.9	59.6	58.3	62.2	62.2

[1] The steak for which prices are here quoted is known as "porterhouse" in most of the cities included in this report, but in this city it is called "sirloin" steak.
[2] 15-16 ounce can.

FOR 31 CITIES ON APR. 15 AND MAY 15, 1919—Concluded.

Richmond, Va.		Rochester, N. Y.		St. Paul, Minn.		Salt Lake City, Utah.		Scranton, Pa.		Springfield, Ill.	
Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.	Apr., 1919.	May, 1919.
Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
44.1	45.4	40.4	41.6	40.3	40.6	36.5	36.0	48.2	48.6	37.3	38.8
41.8	42.7	38.6	39.9	35.5	36.7	33.9	33.3	43.5	44.1	37.3	37.6
36.7	36.9	33.5	34.0	35.2	34.9	28.8	28.1	38.9	38.6	30.4	30.9
32.3	31.7	30.7	31.1	29.6	29.2	25.4	25.3	32.7	32.9	27.2	27.4
24.8	25.4	23.3	23.5	20.6	20.5	20.5	20.0	22.4	22.8	22.2	23.0
41.7	43.4	40.4	44.1	39.0	39.9	40.4	42.8	43.9	46.3	39.1	40.1
49.2	51.8	47.3	48.1	56.1	56.4	58.8	60.6	58.6	60.7	53.2	54.4
50.6	51.8	52.6	53.5	54.7	55.9	53.8	55.7	56.7	58.8	51.7	53.4
43.8	41.4	41.3	39.0	37.2	36.5	33.0	34.4	45.7	44.9	39.7	39.5
46.4	46.2	46.0	45.1	37.3	37.5	37.5	38.3	45.1	46.5	38.5	38.0
25.8	26.6	30.7	30.8	31.2	31.5	32.1	32.8	34.2	34.6	31.5	32.1
15.7	15.5	13.0	13.5	12.0	11.7	12.5	12.5	13.0	13.0	14.3	14.3
15.7	15.8	15.2	15.2	15.0	15.1	14.8	13.4	14.8	15.1	16.5	16.8
76.6	76.0	72.2	67.7	67.3	63.2	69.1	65.1	70.5	68.3	71.5	65.6
40.3	40.3	39.9	41.1	38.2	38.1	40.0	40.0	39.4	41.3	40.7	43.4
36.8	37.4	33.3	33.6	33.2	34.0	40.0	39.2	36.8	35.8	36.1	36.6
42.3	43.1	41.1	41.1	38.4	39.0	39.1	40.4	42.3	42.2	42.8	42.3
34.3	37.8	33.6	38.4	35.6	38.8	37.2	39.3	35.8	39.4	36.3	39.4
34.5	34.7	32.2	32.8	34.6	34.9	37.7	37.9	33.7	34.4	35.3	36.1
46.2	51.5	48.1	52.4	45.7	48.5	45.8	46.6	50.8	54.2	43.7	49.2
10.0	10.4	9.9	10.0	8.8	9.0	10.0	10.2	10.0	10.0	10.0	10.0
7.2	7.7	7.1	7.5	6.9	7.2	5.8	6.2	7.4	7.9	7.2	7.5
5.7	5.9	6.4	6.3	5.9	6.0	7.7	7.3	7.9	8.4	6.3	6.6
.....	10.2	.....	6.7	.....	6.8	.....	8.8	.....	10.1	.....	9.7
14.6	14.5	13.6	13.6	14.5	14.5	14.5	14.7	13.8	14.1	14.9	15.0
25.2	25.2	24.7	24.6	25.3	25.7	26.3	25.6	24.9	25.4	26.5	26.9
14.7	14.4	13.4	13.5	13.6	13.6	13.0	12.7	13.3	13.3	13.8	13.5
.....	18.6	.....	18.9	.....	16.9	.....	16.3	.....	21.3	.....	15.4
13.8	13.1	11.5	11.8	10.0	10.3	12.7	12.0	13.9	13.9	12.3	12.5
2.8	3.3	2.6	3.2	2.3	2.6	2.1	2.3	2.6	3.1	2.8	2.9
7.5	11.1	5.9	12.5	4.9	8.5	6.7	13.6	6.8	10.1	6.8	10.4
11.0	9.6	5.2	10.9	8.3	10.4	7.2	9.2	9.6	10.5	9.5	9.5
15.2	15.0	15.2	15.3	19.8	19.8	17.5	16.9	16.9	16.8	19.7	19.3
18.9	18.4	19.9	19.6	17.2	17.5	18.0	17.9	19.9	20.1	16.3	17.2
21.5	21.8	18.8	19.0	16.1	16.5	18.3	17.5	18.8	18.9	17.0	17.3
17.1	17.9	15.9	16.7	16.4	16.3	16.6	16.8	16.8	17.3	16.7	16.5
10.9	10.9	10.2	10.3	11.1	10.9	11.1	11.0	10.4	10.3	11.0	11.0
81.8	83.2	60.8	59.8	60.7	62.0	68.9	68.5	65.3	65.3	80.9	80.0
38.3	39.8	35.5	37.7	38.3	41.5	46.1	47.4	38.0	40.9	38.6	39.1
22.1	22.5	21.6	22.4	21.6	23.4	18.7	18.2	19.8	22.2	19.8	22.9
16.0	16.4	15.0	15.3	15.7	16.3	15.4	15.6	14.8	14.9	17.9	19.1
40.9	42.1	40.5	40.2	50.0	60.0	44.2	43.8	35.0	35.6	37.5	39.2
56.3	53.8	55.6	58.3	54.1	56.6	55.4	52.5	53.9	56.2	55.8	55.7

[3] Baked weight.
[4] 8-ounce package.
[5] 28-ounce package.
[6] No. 2 can.

Retail Prices of Dry Goods in the United States.

THE following table gives the average retail prices of 10 articles of dry goods for May 15 and October 15, 1918, and for February 15 and May 15, 1919. The averages given are based on the retail prices of standard brands only.

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON MAY 15 AND OCT. 15, 1918, AND ON FEB. 15 AND MAY 15, 1919, IN 50 CITIES.

Article.	Unit.	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		1918		1919		1918		1919		1918		1919	
		May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.
Calico, 24 to 25 inch	Yard.	$0.200	$0.250	.....	.....	$0.235	$0.350	$0.215	$0.150	$0.210	$0.210	$0.177	$0.150
Percale	Yard.	.299	.400	0.384	0.379	.316	.409	.361	.315	.305	.370	.310	.317
Gingham, apron, 27 to 28 inch	Yard.	.267	.320	.274	.233	.276	.292	.253	.240	.258	.279	.260	.213
Gingham, dress, 27-inch	Yard.	.306	.383	.369	.343	.290	.394	.323	.347	.287	.413	.358	.326
Gingham, dress, 32-inch	Yard.	.....	.521	.543	.525	.....	.521	.472	.531	.....	.503	.518	.532
Muslin, bleached	Yard.	.321	.338	.280	.272	.345	.384	.289	.273	.250	.331	.263	.270
Sheeting, bleached, 9-4	Yard.	.730	.788	.744	.724	.798	.890	.809	.793	.639	.698	.672	.640
Sheets, bleached, 81 by 90	Each.	1.964	2.004	1.935	1.849	2.077	2.268	1.899	1.929	1.594	1.838	1.742	1.716
Outing flannel, 27 to 28 inch	Yard.	.306	.377	.337	.293	.300	.392	.298	.346	.287	.349	.355	.293
Flannel, white, wool, 27-inch	Yard.	.....	.750	.750	.925	.....	.945	.945	1.100	.....	.990	.....	.....
Blankets, cotton, 66 by 80	Pair.	.....	4.792	5.490	4.987	.....	5.938	5.175	5.900	.....	5.310	5.475	6.560

Article.	Unit.	Boston, Mass.				Bridgeport, Conn.				Buffalo, N. Y.			
Calico, 24 to 25 inch	Yard.	$0.197	$0.220	$0.190	$0.190	$0.147	$0.190	$0.190	$0.150	$0.193	$0.263	$0.218	$0.178
Percale	Yard.	.325	.397	.346	.279	.250	.395	.338	.295	.316	.384	.363	.308
Gingham, apron, 27 to 28 inch	Yard.	.305	.301	.275	.250	.260	.290	.260	.245	.277	.307	.268	.230
Gingham, dress, 27-inch	Yard.	.310	.368	.289	.267	.350	.377	.325	.304	.328	.360	.355	.319
Gingham, dress, 32-inch	Yard.	.....	.504	.516	.523	.....	.544	.529	.501	.....	.579	.578	.583
Muslin, bleached	Yard.	.309	.378	.302	.291	.290	.357	.280	.275	.328	.346	.288	.289
Sheeting, bleached, 9-4	Yard.	.751	.834	.798	.752	.723	.870	.797	.768	.784	.854	.793	.766
Sheets, bleached, 81 by 90	Each.	1.950	2.164	2.026	1.909	1.668	2.155	1.990	1.887	1.925	2.108	1.993	1.860
Outing flannel, 27 to 28 inch	Yard.	.391	.368	.311	.312	.235	.338	.320	.289	.355	.377	.343	.283
Flannel, white, wool, 27-inch	Yard.	.....	1.125	1.000	1.117	.....	.760	.783	.745	.....	.917	.886	.882
Blankets, cotton, 66 by 80	Pair.	.....	5.650	5.783	4.750	.....	6.950	4.063	.....	.....	6.124	6.194	6.298

Article.	Unit.	Butte, Mont.				Charleston, S. C.				Chicago, Ill.			
Calico, 24 to 25 inch	Yard.	$0.150	$0.168	$0.174	$0.150	$0.220	$0.253	$0.159	$0.158	$0.183	$0.246	$0.195	$0.181
Percale	Yard.	.300	.329	.330	.330	.338	.388	.356	.316	.355	.350	.310	.348
Gingham, apron, 27 to 28 inch	Yard.	.250	.250	.250	.220	.258	.286	.228	.197	.250	.268	.212	.222
Gingham, dress, 27-inch	Yard.	.317	.363	.310	.328	.326	.350	.333	.308	.343	.363	.323	.330
Gingham, dress, 32-inch	Yard.	.....	.533	.400	.448	.....	.413	.428	.432	.....	.614	.626	.581
Muslin, bleached	Yard.	.333	.363	.313	.259	.303	.312	.275	.244	.307	.343	.300	.294
Sheeting, bleached, 9-4	Yard.	.725	.839	.808	.836	.670	.831	.745	.729	.822	.801	.762	.765
Sheets, bleached, 81 by 90	Each.	2.000	2.242	2.200	2.133	1.796	2.016	2.032	1.801	2.040	2.140	1.932	1.831
Outing flannel, 27 to 28 inch	Yard.	.250	.349	.317	.314	.318	.368	.294	.280	.349	.364	.353	.288
Flannel, white, wool, 27-inch	Yard.	.....	.850	.925	.920	.....	.650	.....	.....	.....	.900	.....	.....
Blankets, cotton, 66 by 80	Pair.	.....	5.990	5.817	5.800	.....	5.160	.....	.....	.....	5.433	5.433	5.304

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON MAY 15 AND OCT. 15, 1918, AND ON FEB. 15 AND MAY 15, 1919, IN 50 CITIES—Continued.

Article.	Unit.	Cincinnati, Ohio.				Cleveland, Ohio.				Columbus, Ohio.			
		1918		1919		1918		1919		1918		1919	
		May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.
Calico, 24 to 25 inch	Yard.	$0.233	$0.238	$0.194	$0.160	$0.201	$0.233	$0.155	$0.150	$0.196	$0.230	$0.180	$0.176
Percale	Yard.	.283	.319	.295	.290	.320	.387	.315	.339	.336	.383	.348	.343
Gingham, apron, 27 to 28 inch	Yard.	.253	.270	.254	.230	.267	.307	.227	.250	.250	.307	.285	.212
Gingham, dress, 27-inch	Yard.	.290	.314	.298	.275	.300	.352	.297	.329	.350	.371	.368	.354
Gingham, dress, 32-inch	Yard.	.....	.588	.589	.562	.....	.545	.430	.515	.....	.592	.566	.588
Muslin, bleached	Yard.	.269	.303	.268	.256	.338	.358	.253	.290	.309	.348	.267	.263
Sheeting, bleached, 9–4	Yard.	.726	.798	.702	.701	.776	.829	.733	.758	.769	.806	.781	.726
Sheets, bleached, 81 by 90	Each.	1.743	1.999	1.901	1.830	1.965	2.124	1.650	1.777	1.906	2.047	1.919	1.877
Outing flannel, 27 to 28 inch	Yard.	.343	.388	.337	.300	.360	.362	.30½	.298	.361	.424	.341	.329
Flannel, white, wool, 27-inch	Yard.	.....	.650	.875	.....	.....	1.175	.....	.....	.....	1.125	.....	.900
Blankets, cotton, 66 by 80	Pair.	.....	6.400	6.375	.....	.....	5.938	5.475	6.542	.....	6.567	6.370	5.980

Article.	Unit.	Dallas, Tex.				Denver, Colo.				Detroit, Mich.			
Calico, 24 to 25 inch	Yard.	$0.198	$0.217	$0.183	$0.186	$0.229	$0.238	$0.158	.....	$0.210	$0.202	$0.227	$0.164
Percale	Yard.	.330	.358	.338	.330	.450	.490	.467	0.360	.326	.392	.336	.337
Gingham, apron, 27 to 28 inch	Yard.	.225	.250	.233	.197	.300	.342	.250	.250	.268	.287	.257	.241
Gingham, dress, 27-inch	Yard.	.310	.325	.330	.320	.350	.360	.389	.332	.275	.326	.332	.317
Gingham, dress, 32-inch	Yard.	.....	.538	.549	.527	.....	.638	.717	.671	.....	.540	.510	.489
Muslin, bleached	Yard.	.282	.291	.263	.254	.361	.370	.309	.287	.345	.366	.291	.291
Sheeting, bleached, 9–4	Yard.	.672	.756	.704	.658	.939	.953	.955	.839	.771	.840	.793	.760
Sheets, bleached, 81 by 90	Each.	1.628	1.925	1.866	1.656	2.397	2.359	2.377	2.082	2.083	2.188	2.019	1.908
Outing flannel, 27 to 28 inch	Yard.	.276	.340	.404	.274	.390	.396	.408	.356	.320	.361	.336	.293
Flannel, white, wool, 27-inch	Yard.	.....	.788	.788	.....	.....	.979	1.067	1.025	.....	1.025	.....	.995
Blankets, cotton, 66 by 80	Pair.	.....	6.483	5.920	5.667	.....	5.950	5.958	6.057	.....	4.696	5.000	5.238

Article.	Unit.	Fall River, Mass.				Houston, Tex.				Indianapolis, Ind.			
Calico, 24 to 25 inch	Yard.	$0.190	$0.190	$0.170	$0.170	.....	$0.203	$0.188	$0.150	$0.200	$0.257	$0.142	$0.164
Percale	Yard.	.363	.373	.357	.308	.....	.350	.400	.348	.314	.368	.328	.313
Gingham, apron, 27 to 28 inch	Yard.	.266	.290	.277	.223	.....	.268	.270	.225	.245	.304	.228	.263
Gingham, dress, 27-inch	Yard.	.310	.316	.284	.293	.....	.329	.360	.297	.277	.349	.305	.320
Gingham, dress, 32-inch	Yard.	.....	.520	.510	.476	.....	.512	.625	.553	.....	.508	.439	.468
Muslin, bleached	Yard.	.304	.350	.301	.260	.....	.301	.285	.259	.302	.326	.289	.292
Sheeting, bleached, 9–4	Yard.	.727	.835	.863	.795	.....	.755	.713	.608	.752	.829	.767	.780
Sheets, bleached, 81 by 90	Each.	1.690	2.080	1.883	1.824	.....	1.883	1.695	1.577	1.688	2.054	1.951	1.897
Outing flannel, 27 to 28 inch	Yard.	.240	.373	.303	.297	.....	.360	.275	.265	.326	.378	.328	.293
Flannel, white, wool, 27-inch	Yard.	.....	1.057	.....	.....	.....	.615	.670	.722	.....	.835	.923	.895
Blankets, cotton, 66 by 80	Pair.	.....	5.435	.....	5.980	.....	7.467	6.125	6.433	.....	5.988	5.893	5.495

Article.	Unit.	Jacksonville, Fla.				Kansas City, Mo.				Little Rock, Ark.			
Calico, 24 to 25 inch	Yard.	$0.193	$0.254	$0.180	$0.225	$0.235	$0.247	$0.190	$0.184	$0.229	$0.201	$0.169	$0.188
Percale	Yard.	.320	.442	.427	.445	.350	.436	.438	.373	.317	.361	.322	.322
Gingham, apron, 27 to 28 inch	Yard.	.300	.314	.290	.263	.295	.316	.273	.250	.238	.280	.248	.225
Gingham, dress, 27-inch	Yard.	.343	.368	.350	.370	.326	.390	.386	.369	.285	.325	.291	.316
Gingham, dress, 32-inch	Yard.	.....	.524	.445	.528	.....	.588	.562	.610	.....	.495	.468	.432
Muslin, bleached	Yard.	.338	.348	.307	.330	.319	.359	.311	.324	.284	.309	.249	.269
Sheeting, bleached, 9–4	Yard.	.740	.831	.775	.850	.790	.894	.818	.828	.700	.806	.788	.729
Sheets, bleached, 81 by 90	Each.	2.003	2.035	2.000	2.117	1.760	2.229	1.915	1.910	1.708	1.915	1.759	1.819
Outing flannel, 27 to 28 inch	Yard.	.317	.351	.330	.288	.310	.400	.370	.351	.291	.336	.270	.281
Flannel, white, wool, 27-inch	Yard.	.....	.775	.....	.650	.....	.....	.890	.....	.....	1.125	.764	1.000
Blankets, cotton, 66 by 80	Pair.	.....	5.995	6.500	6.500	.....	6.108	6.480	6.000	.....	4.910	4.531	5.000

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON MAY 15 AND OCT. 15, 1918, AND ON FEB. 15 AND MAY 15, 1919, IN 50 CITIES—Continued.

Article.	Unit.	Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
		1918		1919		1918		1919		1918		1919	
		May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.
		$	$	$	$	$	$	$	$	$	$	$	$
Calico, 24 to 25 inch	Yard.	.....	0.255	0.207	0.186	0.180	0.244	0.160	0.190	0.223	0.279	0.161	0.215
Percale	Yard.	0.329	.439	.439	.379	.325	.410	.348	.340	.305	.398	.358	.277
Gingham, apron, 27 to 28 inch	Yard.	.280	.350	.263	.263	.263	.299	.248	.202	.300	.284	.261	.220
Gingham, dress, 27-inch	Yard.	.297	.400	.371	.361	.322	.403	.401	.323	.353	.353	.318	.281
Gingham, dress, 32-inch	Yard.	.....	.549	.538	.600	.....	.583	.559	.564	.....	.513	.492	.408
Muslin, bleached	Yard.	.339	.360	.317	.275	.292	.341	.263	.286	.334	.355	.275	.283
Sheeting, bleached, 9–4	Yard.	.740	.812	.769	.755	.689	.778	.739	.730	.777	.834	.734	.699
Sheets, bleached, 81 by 90	Each.	1.944	2.066	1.968	1.853	1.818	1.961	2.064	1.967	2.101	1.958	1.774	1.688
Outing flannel, 27 to 28 inch	Yard.	.350	.397	.392	.360	.377	.403	.374	.377	.283	.388	.275	.277
Flannel, white, wool, 27-inch	Yard.	.....	1.100	1.350	.900	.....	.....	.....	.....	.....	1.285	.....	.....
Blankets, cotton, 66 by 80	Pair.	.....	5.969	6.417	6.494	.....	5.960	6.125	.....	.....	4.926	4.779	5.426

Article.	Unit.	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		1918		1919		1918		1919		1918		1919	
		May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.
		$	$	$	$	$	$	$	$	$	$	$	$
Calico, 24 to 25 inch	Yard.	0.235	0.259	0.221	0.184	0.180	0.209	0.170	0.153	0.183	0.226	0.156	0.150
Percale	Yard.	.333	.424	.380	.356	.316	.430	.335	.344	.313	.387	.357	.366
Gingham, apron, 27 to 28 inch	Yard.	.280	.293	.263	.230	.258	.278	.246	.226	.220	.273	.256	.237
Gingham, dress, 27-inch	Yard.	.333	.352	.330	.288	.280	.345	.323	.330	.306	.346	.336	.329
Gingham, dress, 32-inch	Yard.	.....	.546	.553	.563	.....	.549	.542	.510	.....	.606	.610	.581
Muslin, bleached	Yard.	.322	.348	.285	.284	.313	.335	.304	.295	.313	.340	.285	.278
Sheeting, bleached, 9–4	Yard.	.786	.854	.788	.738	.752	.825	.814	.739	.750	.812	.741	.698
Sheets, bleached, 81 by 90	Each.	1.981	2.164	1.978	2.024	2.248	2.133	1.981	1.887	1.998	2.163	1.950	1.896
Outing flannel, 27 to 28 inch	Yard.	.288	.360	.331	.290	.320	.331	.313	.329	.328	.408	.349	.313
Flannel, white, wool, 27-inch	Yard.	.....	1.350	.....	.....	.....	.850	.600	.825	.....	.800	.....	1.000
Blankets, cotton, 66 by 80	Pair.	.....	6.033	5.777	5.921	.....	6.079	6.520	5.904	.....	5.762	5.497	5.732

Article.	Unit.	Mobile, Ala.				Newark, N. J.				New Haven, Conn.			
		1918		1919		1918		1919		1918		1919	
		May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.
		$	$	$	$	$	$	$	$	$	$	$	$
Calico, 24 to 25 inch	Yard.	.....	0.246	0.190	0.154	0.200	0.260	0.173	0.177	0.190	0.233	0.240	.....
Percale	Yard.	.....	.373	.362	.311	.350	.430	.325	.330	.290	.393	.346	0.321
Gingham, apron, 27 to 28 inch	Yard.	.....	.280	.243	.193	.260	.270	.230	.203	.290	.293	.248	.194
Gingham, dress, 27-inch	Yard.	.....	.358	.295	.301	.328	.373	.284	.290	.296	.338	.324	.257
Gingham, dress, 32-inch	Yard.	.....	.531	.500	.477	.....	.553	.516	.533	.....	.537	.528	.505
Muslin, bleached	Yard.	.....	.341	.275	.258	.293	.330	.291	.317	.331	.351	.286	.269
Sheeting, bleached, 9–4	Yard.	.....	.806	.698	.595	.776	.849	.761	.771	.773	.778	.699	.670
Sheets, bleached, 81 by 90	Each.	.....	2.071	2.000	1.620	1.877	2.072	1.849	1.916	1.878	1.975	1.763	1.696
Outing flannel, 27 to 28 inch	Yard.	.....	.353	.221	.276	.354	.372	.307	.272	.295	.342	.296	.243
Flannel, white, wool, 27-inch	Yard.	.....	.....	.....	.650	.....	1.650	1.450	1.250	.....	1.013	.925	.883
Blankets, cotton, 66 by 80	Pair.	.....	6.107	6.740	.....	.....	5.750	4.750	4.958	.....	4.688	4.495	4.796

Article.	Unit.	New Orleans, La.				New York, N. Y.				Norfolk, Va.			
		1918		1919		1918		1919		1918		1919	
		May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.
		$	$	$	$	$	$	$	$	$	$	$	$
Calico, 24 to 25 inch	Yard.	0.200	0.250	0.150	0.150	0.265	0.264	0.210	0.205	0.159	0.250	0.220	0.250
Percale	Yard.	.400	.375	.320	.350	.357	.424	.371	.343	.335	.434	.360	.314
Gingham, apron, 27 to 28 inch	Yard.	.288	.267	.250	.250	.281	.281	.247	.212	.290	.295	.270	.250
Gingham, dress, 27-inch	Yard.	.313	.336	.283	.287	.315	.368	.347	.335	.317	.365	.336	.357
Gingham, dress, 32-inch	Yard.	.....	.459	.520	.508	.....	.552	.777	.616	.....	.572	.557	.508
Muslin, bleached	Yard.	.267	.317	.238	.227	.343	.366	.288	.288	.301	.354	.292	.257
Sheeting, bleached, 9–4	Yard.	.660	.760	.750	.620	.809	.923	.797	.757	.718	.782	.791	.819
Sheets, bleached, 81 by 90	Each.	1.667	1.888	1.898	1.788	2.055	2.189	1.909	1.878	1.752	2.062	1.916	1.760
Outing flannel, 27 to 28 inch	Yard.	.300	.339	.350	.300	.366	.388	.324	.307	.288	.352	.311	.343
Flannel, white, wool, 27-inch	Yard.	.....	.....	.....	.....	.....	1.022	.911	1.029	.....	1.000	.875	1.000
Blankets, cotton, 66 by 80	Pair.	.....	7.000	4.540	5.980	.....	5.750	5.686	5.524	.....	6.796	5.183	5.990

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON MAY 15 AND OCT. 15, 1918, AND ON FEB. 15 AND MAY 15, 1919, IN 50 CITIES—Continued.

Article.	Unit.	Omaha, Nebr.				Peoria, Ill.				Philadelphia, Pa.			
		1918		1919		1918		1919		1918		1919	
		May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.
		$	$	$	$	$	$	$	$	$	$	$	$
Calico, 24 to 25 inch	Yard.	0.209	0.237	0.169	0.162	0.138	0.207	0.213	0.180	0.225	0.211	0.159	0.207
Percale	Yard.	.328	.389	.377	.348	.315	.343	.330	.336	.338	.376	.307	.304
Gingham, apron, 27 to 28 inch	Yard.	.250	.287	.270	.232	.230	.223	.250	.230	.290	.289	.239	.203
Gingham, dress, 27-inch	Yard.	.294	.367	.345	.337	.287	.307	.335	.328	.330	.367	.290	.320
Gingham dress, 32-inch	Yard.	.....	.608	.595	.596	.....	.513	.530	.581	.....	.521	.534	.537
Muslin, bleached	Yard.	.292	.362	.317	.289	.279	.350	.307	.277	.303	.329	.283	.288
Sheeting, bleached, 9–4	Yard.	.732	.776	.726	.726	.705	.705	.877	.824	.715	.866	.761	.754
Sheets, bleached, 81 by 90	Each.	1.956	2.071	1.853	2.013	1.773	2.208	2.126	2.148	1.780	2.047	1.856	1.813
Outing flannel, 27 to 28 inch	Yard.	.330	.371	.346	.328	.316	.340	.379	.353	.330	.391	.308	.285
Flannel, white, wool, 27-inch	Yard.	.....	1.163	1.125	1.150	.....	.....	.....	.....	.....	1.022	.938	1.070
Blankets, cotton, 66 by 80	Pair.	.....	6.667	6.133	6.381	.....	6.125	5.883	5.700	.....	4.836	5.153	5.472
		Pittsburg, Pa.				Portland, Me.				Portland, Oreg.			
		$	$	$	$	$	$	$	$	$	$	$	$
Calico, 24 to 25 inch	Yard.	0.204	0.276	0.209	0.167	0.250	.....	.....	.....	0.179	0.239	0.142	0.148
Percale	Yard.	.320	.361	.326	.310	.323	0.398	0.330	0.330	.300	.370	.00	.358
Gingham, apron, 27 to 28 inch	Yard.	.253	.286	.241	.192	.310	.310	.270	.250	.250	.280	.200	.200
Gingham, dress, 27-inch	Yard.	.301	.339	.305	.309	.315	.390	.330	.330	.263	.366	.340	.338
Gingham, dress, 32-inch	Yard.	.....	.554	.526	.541	.....	.535	.513	.503	.....	.480	.450	.693
Muslin, bleached	Yard.	.278	.338	.281	.267	.298	.338	.279	.268	.290	.325	.258	.277
Sheeting, bleached, 9–4	Yard.	.721	.857	.785	.727	.688	.775	.688	.645	.732	.769	.700	.700
Sheets, bleached, 81 by 90	Each.	1.821	2.090	1.788	1.707	1.780	1.976	1.793	1.658	1.993	1.960	1.900	1.889
Outing flannel, 27 to 28 inch	Yard.	.278	.352	.324	.302	.238	.373	.345	.330	.360	.317	.333	.335
Flannel, white, wool, 27-inch	Yard.	.....	.800	.760	.785	.....	1.122	1.240	.....	.....	.983	.....	1.100
Blankets, cotton, 66 by 80	Pair.	.....	6.536	5.957	5.750	.....	5.495	5.417	5.625	.....	6.063	.....	5.640
		Providence, R. I.				Richmond, Va.				Rochester, N. Y.			
		$	$	$	$	$	$	$	$	$	$	$	$
Calico, 24 to 25 inch	Yard.	0.196	0.274	0.186	0.190	0.203	0.238	0.188	0.164	0.185	0.198	0.138	0.128
Percale	Yard.	.300	.372	.320	.300	.297	.409	.348	.318	.325	.372	.285	.277
Gingham, apron, 27 to 28 inch	Yard.	.278	.297	.240	.214	.263	.294	.247	.206	.227	.248	.238	.194
Gingham, dress, 27-inch	Yard.	.282	.370	.306	.316	.305	.342	.320	.290	.246	.337	.309	.276
Gingham, dress, 32-inch	Yard.	.....	.523	.474	.495	.....	.471	.457	.436	.....	.522	.562	.561
Muslin, bleached	Yard.	.313	.352	.263	.257	.320	.365	.293	.273	.269	.309	.266	.246
Sheeting, bleached, 9–4	Yard.	.727	.823	.724	.676	.854	.844	.787	.742	.688	.775	.696	.712
Sheets, bleached, 81 by 90	Each.	1.853	2.230	2.078	1.734	2.000	2.075	1.906	1.849	1.830	2.075	1.934	1.783
Outing flannel, 27 to 28 inch	Yard.	.....	.390	.323	.255	.290	.353	.330	.308	.284	.355	.301	.282
Flannel, white, wool, 27-inch	Yard.	.....	.990	.990	.915	.....	.914	.971	.852	.....	.590	1.375	.....
Blankets, cotton, 66 by 80	Pair.	.....	6.018	5.995	6.058	.....	6.237	5.618	5.678	.....	5.988	6.493	5.500
		St. Louis, Mo.				St. Paul, Minn.				Salt Lake, Utah.			
		$	$	$	$	$	$	$	$	$	$	$	$
Calico, 24 to 25 inch	Yard.	0.192	0.250	0.208	0.195	0.202	0.214	0.157	0.156	0.183	0.204	0.169	0.158
Percale	Yard.	.350	.430	.370	.320	.330	.361	.308	.296	.335	.424	.395	.351
Gingham, apron, 27 to 28 inch	Yard.	.250	.290	.255	.220	.255	.284	.249	.220	.250	.294	.235	.245
Gingham, dress, 27-inch	Yard.	.313	.372	.334	.289	.314	.349	.315	.309	.331	.366	.349	.329
Gingham, dress, 32-inch	Yard.	.....	.651	.585	.594	.....	.538	.541	.484	.....	.656	.710	.635
Muslin, bleached	Yard.	.298	.361	.275	.249	.353	.344	.324	.277	.304	.329	.311	.294
Sheeting, bleached, 9–4	Yard.	.725	.810	.712	.689	.788	.867	.809	.733	.757	.826	.793	.762
Sheets, bleached, 81 by 90	Each.	1.871	1.987	1.891	1.900	2.147	2.227	2.128	1.861	2.233	2.082	2.027	1.971
Outing flannel, 27 to 28 inch	Yard.	.333	.388	.328	.351	.316	.359	.316	.278	.311	.388	.382	319
Flannel, white, wool, 27-inch	Yard.	.....	.875	.775	.933	.....	.....	.....	.980	.....	1.573	1.350	1.258
Blankets, cotton, 66 by 80	Pair.	.....	6.750	6.690	6.500	.....	5.542	5.971	5.698	.....	6.366	5.675	6.980

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON MAY 15 AND OCT. 15, 1918, AND ON FEB. 15 AND MAY 15, 1919, IN 50 CITIES—Concluded.

Article.	Unit.	San Francisco, Calif.				Scranton, Pa.				Seattle, Wash.			
		1918		1919		1918		1919		1918		1919	
		May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.
		$	$	$	$	$	$	$	$	$	$	$	$
Calico, 24 to 25 inch	Yard.	.....	.....	.....	.....	0.230	0.225	0.188	0.187	0.219	0.250	0.213	0.180
Percale	Yard.	0.392	0.460	0.400	0.417	.350	.337	.350	.285	.342	.456	.389	.357
Gingham, apron, 27 to 28 inch	Yard.	.283	.300	.317	.288	.268	.287	.260	.220	.250	.300	.250	.240
Gingham, dress, 27-inch	Yard.	.306	.350	.336	.333	.301	.344	.320	.291	.338	.383	.306	.328
Gingham, dress, 32-inch	Yard.	.....	.545	.550	.500	.....	.553	.517	.493	.....	.510	.608	.560
Muslin, bleached	Yard.	.328	.336	.210	.286	.324	.352	.284	.282	.353	.344	.300	.253
Sheeting, bleached, 9–4	Yard.	.838	.854	.800	.771	.711	.799	.777	.752	.850	.900	.855	.767
Sheets, bleached, 81 by 90	Each.	2.090	2.077	1.934	1.905	1.988	2.013	1.954	1.902	2.167	2.319	2.200	1.929
Outing flannel, 27 to 28 inch	Yard.	.356	.418	.381	.359	.308	.371	.322	.312	.335	.390	.362	.338
Flannel, white, wool, 27-inch	Yard.	.....	1.200	.750	.750	.....	.688	.790	.980	.....	1.083	.875	.875
Blankets, cotton, 66 by 80	Pair.	.....	5.762	6.379	5.943	.....	5.842	5.993	6.288	.....	5.890	6.050	5.675

Article.	Unit.	Springfield, Ill.				Washington, D. C.			
		1918		1919		1918		1919	
		May 15.	Oct. 15.	Feb. 15.	May 15.	May 15.	Oct. 15.	Feb. 15.	May 15.
Calico, 24 to 25 inch	Yard.	$0.207	$0.233	$0.168	$0.160	$0.263	$0.198	$0.200	.....
Percale	Yard.	.299	.400	.314	.335	.350	.420	.348	$0.338
Gingham, apron, 27 to 28 inch	Yard.	.256	.283	.250	.240	.300	.281	.244	.243
Gingham, dress, 27-inch	Yard.	.319	.368	.321	.320	.410	.390	.353	.381
Gingham, dress, 32-inch	Yard.	.....	.529	.571	.499	.....	.510	.559	.534
Muslin, bleached	Yard.	.314	.316	.266	.262	.350	.346	.268	.278
Sheeting, bleached, 9–4	Yard.	.719	.778	.698	.737	.831	.813	.801	.740
Sheets, bleached, 81 by 90	Each.	1.664	1.803	1.780	1.967	2.081	2.144	1.890	1.876
Outing flannel, 27 to 28 inch	Yard.	.286	.341	.292	.284	.400	.398	.315	.304
Flannel, white, wool, 27-inch	Yard.	.....	.....	.....	.875	.....	1.195	1.380	.....
Blankets, cotton, 66 by 80	Pair.	.....	5.483	4.000	4.650	.....	5.556	6.500	7.500

Trend in Retail Prices of Food in 39 Cities, 1913 to May, 1919.

By Elma B. Carr.

THE following table shows the average family expenditure for 22 articles of food,[1] combined, for the years 1913 to 1918, inclusive, and for the first five months of 1919 for each of the 39 cities from which prices have been secured by the Bureau since 1913. These figures are based on the actual retail prices sent to the Bureau each month by retail merchants and on the average family consumption of these articles in each city. To obtain a combined effect of all increases and decreases, it is necessary to recognize the relative importance of each of the articles in accordance with the quantities consumed, and for the purpose of showing the movement in retail prices, it is assumed that this relative importance remained the same throughout the whole period, 1913 to May, 1919.

By using as a base for each city its average family expenditure in the year 1913, percentages of increase or decrease have been computed which show the trend in the weighted cost of these 22 articles of food combined for each successive period as compared with the year 1913. The percentage of increase or decrease is also shown for each year 1914 to 1918, based on the preceding year, and for the months of January to May, 1919, based on the preceding month. January, 1919, is, of course, based on December, 1918.

Every effort is made to secure quotations on similar grades of commodities in all cities. There are, however, slight differences. The greatest difference is in the method of cutting sirloin steak in Boston, Mass.; Manchester, N. H.; Philadelphia, Pa.; and Providence, R. I. The cut known as "sirloin" in these four cities would be known in other cities as "porterhouse." There is in these cities, owing to the method of dividing the round from the loin, no cut that corresponds to that of "sirloin" in other cities. There is also a greater amount of trimming demanded by the trade in these cities than in others. This is particularly true of Providence, R. I. These, together with the fact that the beef sold in these cities is of the best grade, appear to be the main reasons why the retail prices of meats in these cities are higher than in others.

The average number of persons in the family varies according to the cities, and these 22 articles represent a varying proportion of the entire food budgets according to locality. Hence, no attempt should be made in this table to compare one city with another. The table is intended to show merely the trend in the retail price of these 22 food articles since 1913 for each individual city.

[1] Sirloin steak, round steak, rib roast, chuck roast, plate boiling beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea.

COMPARISON OF FAMILY EXPENDITURES FOR 22 FOOD ARTICLES, COMBINED, IN 39 CITIES, BY YEARS, 1913 TO 1918, AND BY MONTHS, JANUARY TO MAY, 1919.

Year and month.	Atlanta, Ga.			Baltimore, Md.			Birmingham, Ala.		
	Expenditure.	Percentage increase over—		Expenditure.	Percentage increase over—		Expenditure.	Percentage increase over—	
		1913	Preceding year or month.		1913	Preceding year or month.		1913	Preceding year or month.
1913	$361.00	.....	.....	$335.15	.....	.....	$377.53	.....	.....
1914	367.31	2	2	341.99	2	2	401.94	6	6
1915	355.75	[1] 1	[1] 3	338.21	1	[1] 1	394.33	4	[1] 2
1916	391.59	8	10	378.10	13	12	438.99	16	11
1917	515.68	43	32	509.36	52	35	574.64	52	31
1918	611.27	69	19	616.99	84	21	651.53	73	13
1919, January	[2] 683.04	89	1	[2] 679.48	103	[3]	[2] 732.08	94	[3]
February	[2] 631.03	75	[1] 8	[2] 628.29	87	[1] 8	[2] 669.47	77	[1] 9
March	[2] 637.78	77	1	[2] 625.29	87	[3]	[2] 694.83	84	4
April	[2] 650.33	80	2	[2] 647.42	93	4	[2] 718.69	90	3
May	[2] 663.14	84	2	[2] 662.28	98	2	[2] 735.30	95	2
	Boston, Mass.			**Buffalo, N. Y.**			**Charleston, S. C.**		
1913	$388.16	.....	.....	$318.15	.....	.....	$348.60	.....	.....
1914	394.94	2	2	321.27	1	1	358.18	3	3
1915	391.23	1	[1] 1	321.65	1	[4]	347.98	[3]	[1] 3
1916	432.93	12	11	365.07	15	13	377.60	8	9
1917	552.64	42	28	491.18	54	35	504.70	45	34
1918	636.38	64	15	562.96	77	15	615.25	76	22
1919, January	[2] 692.87	79	[1] 2	[2] 623.35	96	1	[2] 692.50	99	2
February	[2] 643.46	66	[1] 7	[2] 560.76	76	[1] 10	[2] 640.04	84	[1] 8
March	[2] 662.25	71	3	[2] 577.00	81	3	[2] 645.26	85	1
April	[2] 680.46	75	3	[2] 587.33	85	2	[2] 665.70	91	3
May	[2] 703.09	81	3	[2] 607.05	91	3	[2] 680.76	95	2
	Chicago, Ill.			**Cincinnati, Ohio.**			**Cleveland, Ohio.**		
1913	$336.48	.....	.....	$338.26	.....	.....	$354.01	.....	.....
1914	344.65	2	2	342.86	1	1	361.99	2	2
1915	345.00	3	[4]	333.38	[1] 1	[1] 3	354.99	[4]	[1] 2
1916	382.73	14	11	379.53	12	14	403.06	14	14
1917	496.81	48	30	502.37	49	32	530.87	50	32
1918	559.52	66	13	563.33	67	12	590.11	67	11
1919, January	[2] 614.75	83	[3]	[2] 620.02	83	1	[2] 653.59	85	[4]
February	[2] 563.59	68	[1] 8	[2] 573.63	70	[1] 7	[2] 599.86	69	[1] 8
March	[2] 581.35	73	3	[2] 594.17	76	4	[2] 616.84	74	3
April	[2] 602.73	79	4	[2] 623.01	84	5	[2] 640.83	81	4
May	[2] 613.31	82	2	[2] 628.71	86	1	[2] 652.08	84	2
	Dallas, Tex.			**Denver, Colo.**			**Detroit, Mich.**		
1913	$395.41	.....	.....	$247.36	.....	.....	$334.98	.....	.....
1914	405.96	3	3	249.13	1	1	345.26	3	3
1915	402.20	2	[1] 1	253.80	3	2	337.87	1	[1] 2
1916	439.96	11	9	276.23	12	9	382.86	14	13
1917	572.22	45	30	356.55	44	29	510.14	52	33
1918	650.54	65	14	412.78	67	16	580.73	73	14
1919, January	[2] 739.01	87	2	[2] 461.63	87	2	[2] 635.69	90	1
February	[2] 688.91	74	[1] 7	[2] 419.33	70	[1] 9	[2] 572.61	71	[1] 10
March	[2] 703.92	78	2	[2] 439.61	78	5	[2] 592.00	77	3
April	[2] 712.45	80	1	[2] 456.41	85	4	[2] 624.70	86	6
May	[2] 717.11	81	1	[2] 459.89	86	1	[2] 643.31	92	3

[1] Decrease.
[2] Cost of year's supply at prices charged in specified month.
[3] Decrease of less than five-tenths of 1 per cent.
[4] Increase of less than five-tenths of 1 per cent.

COMPARISON OF FAMILY EXPENDITURES FOR 22 FOOD ARTICLES, COMBINED, IN 39 CITIES, BY YEARS, 1913 TO 1918, AND BY MONTHS, JANUARY TO MAY, 1919—Continued.

Year and month.	Expenditure.	Percentage increase over—	
		1913	Preceding year or month.
Fall River, Mass.			
1913	$375.51	.....	.....
1914	382.16	2	2
1915	380.59	1	(1)
1916	421.83	12	11
1917	534.83	42	27
1918	624.66	66	17
1919, January	[4]681.49	81	[3]2
February	[4]646.05	72	[3]5
March	[4]650.89	73	1
April	[4]661.79	76	2
May	[4]680.17	81	3
Indianapolis, Ind.			
1913	$345.23	.....	.....
1914	352.19	2	2
1915	345.33	(2)	[3]2
1916	392.85	14	14
1917	515.32	49	31
1918	563.69	63	9
1919, January	[4]629.45	82	1
February	[4]573.37	66	[3]9
March	[4]591.32	71	3
April	[4]614.37	78	4
May	[4]627.84	82	2
Jacksonville, Fla.			
1913	$377.10	.....	.....
1914	381.66	1	1
1915	377.80	(2)	[3]1
1916	408.31	8	8
1917	521.53	38	28
1918	613.06	63	18
1919, January	[4]696.00	85	[3]7
February	[4]634.41	68	[3]9
March	[4]636.32	69	(2)
April	[4]659.87	75	4
May	[4]669.73	78	1
Kansas City, Mo.			
1913	$340.12	.....	.....
1914	348.57	2	2
1915	348.64	3	(2)
1916	389.00	14	12
1917	509.99	50	31
1918	570.82	68	12
1919, January	[4]637.37	87	(1)
February	[4]548.23	61	[3]14
March	[4]597.52	76	9
April	[4]623.87	83	4
May	[4]636.51	87	1
Little Rock, Ark.			
1913	$390.14	.....	.....
1914	396.82	2	2
1915	393.70	1	[3]1
1916	429.92	10	9
1917	562.06	44	31
1918	649.47	66	16
1919, January	[4]707.97	81	(2)
February	[4]666.99	71	[3]6
March	[4]677.28	74	2
April	[4]694.90	78	3
May	[4]701.48	80	1
Los Angeles, Calif.			
1913	284.84	.....	.....
1914	288.37	1	1
1915	271.46	[3]5	[3]6
1916	290.51	2	7
1917	355.95	25	23
1918	423.44	49	19
1919, January	[4]470.14	65	(1)
February	[4]447.19	57	[3]5
March	[4]449.85	58	1
April	[4]459.12	61	2
May	[4]471.12	65	3
Louisville, Ky.			
1913	$363.85	.....	.....
1914	364.58	(2)	(2)
1915	357.39	[1]2	[1]2
1916	400.57	10	12
1917	546.06	50	36
1918	623.09	71	14
1919, January	[4]687.88	89	(2)
February	[4]634.53	74	[3]8
March	[4]646.31	78	2
April	[4]671.41	85	4
May	[4]692.32	90	3
Manchester, N. H.			
1913	$366.01	.....	.....
1914	375.10	2	2
1915	373.37	2	(1)
1916	413.06	13	11
1917	531.63	45	29
1918	623.51	70	17
1919, January	[4]680.18	86	[3]1
February	[4]622.32	70	[3]9
March	[4]632.87	73	2
April	[4]656.66	79	4
May	[4]672.76	84	2
Memphis, Tenn.			
1913	$368.46	.....	.....
1914	375.75	2	2
1915	368.09	(1)	[3]2
1916	408.81	11	11
1917	540.36	47	32
1918	631.80	71	17
1919, January	[4]703.83	91	(1)
February	[4]651.53	77	[3]7
March	[4]669.44	82	3
April	[4]698.49	90	4
May	[4]712.15	93	2
Milwaukee, Wis.			
1913	$327.25	.....	.....
1914	336.68	3	3
1915	331.94	1	[3]1
1916	376.63	15	13
1917	502.50	54	33
1918	552.87	69	10
1919, January	[4]621.10	90	1
February	[4]562.04	72	[3]10
March	[4]584.95	79	4
April	[4]607.61	86	4
May	[4]622.94	90	3
Minneapolis, Minn.			
1913	$319.98	.....	.....
1914	328.34	3	3
1915	323.73	1	[3]1
1916	363.51	14	12
1917	473.72	48	30
1918	524.03	64	11
1919, January	[4]573.60	79	[3]1
February	[4]536.43	68	[3]6
March	[4]567.01	77	6
April	[4]596.91	87	5
May	[4]607.15	90	2
Newark, N. J.			
1913	$364.92	.....	.....
1914	371.21	2	2
1915	370.97	2	(1)
1916	403.28	11	9
1917	521.98	43	29
1918	610.03	67	17
1919, January	[4]673.03	82	[3]1
February	[4]639.71	74	[3]5
March	[4]635.95	72	[3]1
April	[4]645.87	75	2
May	[4]651.47	77	1

[1] Decrease of less than five-tenths of 1 per cent.
[2] Increase of less than five-tenths of 1 per cent.
[3] Decrease.
[4] Cost of year's suphly at prices charged in specified month.

COMPARISON OF FAMILY EXPENDITURES FOR 22 FOOD ARTICLES, COMBINED, IN 39 CITIES, BY YEARS, 1913 TO 1918, AND BY MONTHS, JANUARY TO MAY, 1919—Concluded.

Year and month.	New Haven, Conn.			New Orleans, La.			New York, N. Y.		
	Expenditure.	Percentage increase over—		Expenditure.	Percentage increase over—		Expenditure.	Percentage increase over—	
		1913	Preceding year or month.		1913	Preceding year or month.		1913	Preceding year or month.
1913	$376.96	.....	.....	$369.29	.....	.....	$355.36	.....	.....
1914	384.53	2	2	376.56	2	2	360.29	1	1
1915	381.89	1	[1] 1	377.38	2	(2)	358.53	1	[1] 1
1916	433.88	15	14	414.73	12	10	397.37	12	11
1917	551.08	46	27	546.78	48	32	520.19	46	31
1918	644.61	71	17	621.97	68	14	593.95	67	14
1919, January	[3]701.09	86	[1] 1	[3]705.09	91	2	[3]666.48	88	[1] 2
February	[3]649.61	72	[1] 7	[3]644.05	74	[1] 9	[3]621.38	75	[1] 7
March	[3]649.56	72	(4)	[3]654.90	77	2	[3]628.69	77	1
April	[3]666.60	77	3	[3]679.02	84	4	[3]640.40	80	2
May	[3]684.20	82	3	[3]693.14	88	2	[3]651.61	83	(2)
	Omaha, Nebr.			**Philadelphia, Pa.**			**Pittsburg, Pa.**		
1913	$334.52	.....	.....	$352.19	.....	.....	$350.35	.....	.....
1914	346.77	4	4	359.06	2	2	359.16	3	3
1915	342.15	2	[1] 1	355.92	1	[1] 1	350.93	(2)	[1] 2
1916	383.58	15	12	397.82	13	12	391.82	12	12
1917	501.51	50	31	515.11	46	29	518.40	48	32
1918	563.67	69	12	603.91	71	17	597.09	70	15
1919, January	[3]625.54	87	1	[3]666.89	89	(2)	[3]668.46	91	2
February	[3]570.30	70	[1] 9	[3]629.48	79	[1] 6	[3]607.35	73	[1] 9
March	[3]594.98	78	4	[3]620.54	76	[1] 1	[3]615.59	76	1
April	[3]626.01	87	5	[3]642.77	83	4	[3]635.19	81	3
May	[3]637.25	91	2	[3]653.46	86	2	[3]646.93	85	2
	Portland, Oreg.			**Providence, R. I.**			**Richmond, Va.**		
1913	$266.03	.....	.....	$380.85	.....	.....	$346.40	.....	.....
1914	266.00	(4)	(4)	392.36	3	3	345.58	(4)	(4)
1915	259.73	[1] 2	[1] 2	385.78	1	[1] 2	348.18	1	1
1916	276.41	4	6	433.79	14	12	384.83	11	11
1917	350.99	32	27	562.76	48	30	509.42	47	32
1918	418.64	57	19	658.28	73	17	610.74	76	20
1919, January	[3]463.26	74	1	[3]716.73	88	[1] 1	[3]683.84	97	1
February	[3]432.71	63	[1] 7	[3]671.89	76	[1] 6	[3]623.48	80	[1] 9
March	[3]447.56	68	3	[3]673.74	77	(2)	[3]623.92	80	(2)
April	[3]451.65	70	1	[3]692.33	82	3	[3]644.51	86	3
May	[3]451.36	70	(4)	[3]713.12	87	3	[3]667.98	93	4
	St. Louis, Mo.			**Salt Lake City, Utah.**			**San Francisco, Calif.**		
1913	$326.36	.....	.....	$261.87	.....	.....	$271.48	.....	.....
1914	338.55	4	4	268.19	2	2	274.39	1	1
1915	330.98	1	[1] 2	268.92	3	(2)	274.99	1	(2)
1916	371.54	14	12	291.34	11	8	286.39	5	4
1917	499.87	53	35	369.39	41	27	352.03	30	23
1918	565.05	73	13	408.07	56	10	423.36	56	20
1919, January	[3]623.76	91	(4)	[3]448.88	71	(4)	[3]467.25	72	[1] 1
February	[3]576.16	77	[1] 8	[3]416.81	59	[1] 7	[3]448.10	65	[1] 4
March	[3]596.93	83	4	[3]436.13	67	5	[3]448.13	65	(2)
April	[3]621.24	90	4	[3]441.21	68	1	[3]451.46	66	1
May	[3]629.48	93	1	[3]441.37	69	(2)	[3]462.78	70	3
	Scranton, Pa.			**Seattle, Wash.**			**Washington, D. C.**		
1913	$335.98	.....	.....	$265.35	.....	.....	$354.82	.....	.....
1914	338.88	1	1	265.85	(2)	(2)	361.40	2	2
1915	334.91	(4)	[1] 1	263.07	[1] 1	[1] 1	357.88	1	[1] 1
1916	377.51	12	13	278.56	5	6	396.16	12	11
1917	492.19	46	30	358.02	35	29	528.39	49	33
1918	570.06	70	16	430.21	62	20	636.13	79	20
1919, January	[3]655.88	90	(4)	[3]477.05	80	(2)	[3]699.23	97	(4)
February	[3]605.80	75	[1] 8	[3]452.12	70	[1] 5	[3]650.07	83	[1] 7
March	[3]605.29	75	(4)	[3]456.28	72	1	[3]655.54	85	1
April	[3]625.12	81	3	[3]458.90	73	1	[3]679.53	92	4
May	[3]642.51	86	3	[3]465.71	76	1	[3]687.89	94	1

[1] Decrease.
[2] Increase of less than five-tenths of 1 per cent.
[3] Cost of year's supply at price in specified month.
[4] Decrease of less than five-tenths of 1 per cent.

Index Numbers of Wholesale Prices in the United States, 1913 to May, 1919.

WHOLESALE prices in the United States showed another decided increase in May, the bureau's weighted index number standing at 206 as compared with 203 for April. Noticeable increases occurred in the three groups of farm products, food, etc., and cloths and clothing, the index numbers for these groups rising from 233 to 238, from 207 to 211, and from 214 to 225, respectively. Smaller increases took place in the lumber and building materials and chemicals and drugs groups. The index numbers for the groups of fuel and lighting, metals and metal products, and house-furnishing goods remained unchanged, while that for the group of miscellaneous commodities dropped from 216 to 213.

Among the important articles whose wholesale prices averaged higher in May than in April were cotton, flaxseed, barley, corn, oats, wheat, hay, hides, hops, hogs, peanuts, cheese, coffee, eggs, wheat flour, fruits, lard, bacon, hams, oleomargarine, rice, leather, silk, cotton and woolen goods, cement, ingot copper, bar silver, glycerin and opium. Rye, cattle, sheep, poultry, tobacco, butter, rye flour, fresh beef, lamb, mutton, veal, vinegar, coke, bar iron, iron ore, acids, lubricating oil, wrapping paper, and malt averaged lower in May than in April, while beans, canned goods, cornmeal, milk, salt, sugar, tea, coal, gasoline, matches, petroleum, brick, glass, lumber, pig iron, and cottonseed meal were practically unchanged in price.

In the period from May, 1918, to May, 1919, the index number of farm products increased from 212 to 238, that of food commodities from 178 to 211, and that of fuel and lighting from 172 to 179. During the same time the index number of lumber and building materials increased from 147 to 163, that of house-furnishing goods from 188 to 231, and that of miscellaneous commodities, including such important articles as cottonseed meal, jute, malt, lubricating oil, newsprint paper, rubber, starch, soap, plug tobacco, and wood pulp, from 197 to 213. On the other hand the index number of cloths and clothing dropped from 234 to 225, that of metals and metal products from 177 to 151, and that of chemicals and drugs from 209 to 168.

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INDEX NUMBERS OF WHOLESALE PRICES IN SPECIFIED MONTHS, 1913, TO MAY, 1919, BY GROUPS OF COMMODITIES.

[1913=100.]

Year and month.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Lumber and building materials.	Chemicals and drugs.	House-furnishing goods.	Miscellaneous.	All commodities.
1913.										
Average for year	100	100	100	100	100	100	100	100	100	100
January	97	99	100	99	107	100	101	100	100	99
April	97	96	100	99	102	101	100	100	99	98
July	101	101	100	100	98	101	99	100	102	101
October	103	102	100	100	99	98	100	100	100	101
1914.										
January	101	102	99	99	92	98	101	103	98	100
April	103	95	100	98	91	99	101	103	99	98
July	104	103	100	90	85	97	101	103	97	99
October	103	107	98	87	83	96	109	103	95	99
1915.										
January	102	106	96	86	83	94	106	101	98	98
April	107	105	98	84	91	94	102	101	97	99
July	108	104	99	84	102	94	107	101	96	101
October	105	104	103	90	100	93	121	101	99	101
1916.										
January	108	114	110	102	126	99	140	105	107	110
April	114	117	119	105	147	102	150	109	111	116
July	118	121	126	105	145	98	143	111	122	119
October	136	140	137	128	151	101	135	114	132	133
1917.										
January	147	150	161	170	183	106	144	128	137	150
February	150	160	162	178	190	108	146	129	138	165
March	162	161	163	181	199	111	151	129	140	160
April	180	182	169	178	208	114	155	151	144	171
May	196	191	173	187	217	117	164	151	148	181
June	196	187	179	193	239	127	165	162	153	184
July	198	180	187	183	257	132	185	165	151	185
August	204	180	193	159	249	133	198	165	156	184
September	203	178	193	155	228	134	203	165	155	182
October	207	183	194	142	182	134	242	165	164	180
November	211	184	202	151	173	135	232	175	165	182
December	204	185	206	153	173	135	230	175	166	181
1918.										
January	205	188	209	169	173	136	216	188	178	185
February	207	186	213	171	175	137	217	188	181	187
March	211	178	220	171	175	142	217	188	184	187
April	217	179	230	170	176	145	214	188	193	191
May	212	178	234	172	177	147	209	188	197	191
June	214	179	243	171	177	148	205	192	199	193
July	221	185	249	178	183	152	202	192	192	198
August	229	191	251	178	183	156	207	227	191	202
September	236	199	251	179	183	158	206	233	195	207
October	223	199	253	179	186	157	204	233	197	204
November	219	203	253	182	186	163	201	233	207	206
December	221	207	246	183	183	163	182	233	204	206
1919.										
January	220	204	231	181	172	160	179	233	206	202
February	215	198	220	181	167	162	173	233	207	197
March	226	200	214	180	161	164	171	233	218	200
April	233	207	214	179	151	161	167	231	216	203
May[1]	238	211	225	179	151	163	168	231	213	206

[1] Preliminary.

Comparison of Retail Price Changes in the United States and Foreign Countries.

THE index numbers of retail prices published by several foreign countries have been brought together with those of this bureau in the subjoined table after having been reduced to a common base, viz, prices for July, 1914, equal 100. This base was selected instead of the average for the year 1913, which is used in other tables of index numbers compiled by the bureau, because of the fact that in some instances satisfactory information for 1913 was not available. For Great Britain, Norway, and Sweden the index numbers are reproduced as published in the original sources, while those for Austria have been rounded off to the nearest whole number from the latest available figures, as published in the British Labor Gazette. All these are shown on the July, 1914, base in the source from which the information is taken. The index numbers here shown for the remaining countries have been obtained by dividing the index for July, 1914, as published, into the index for each month specified in the table. As indicated in the table, some of these index numbers are weighted and some are not, while the number of articles included differs widely. They should not, therefore, be considered as closely comparable one with another. In one or two instances the figures here shown are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities included at successive dates.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND CERTAIN OTHER COUNTRIES.

[July, 1914=100.]

Year and month.	United States: 22 foodstuffs; 45 cities. Weighted.	Australia: 46 foodstuffs; 30 towns. Weighted.	Austria: 18 foodstuffs; Vienna. Weighted.	Canada: 29 foodstuffs; 60 cities. Weighted.	France: 13 articles.	
					Cities over 10,000 population (except Paris). Weighted.	Paris only. Weighted.
1914.						
July	100	100	100	100	[1] 100	100
October	103	99	104	108	.....	.....
1915.						
January	101	107	121	107	[1] 110	120
April	97	113	166	105	.....	114
July	98	131	179	105	[1] 123	120
October	101	133	217	105	.....	118
1916.						
January	105	129	.....	112	[1] 133	134
April	107	131	222	112	[1] 137	132
July	109	130	.....	114	[1] 141	129
October	119	125	.....	125	[1] 146	135
1917.						
January	125	125	272	138	[1] 154	139
February	130	126	.....	141	.....	.....
March	130	126	.....	144	.....	.....
April	142	127	275	145	[1] 171	147
May	148	127	288	159	.....	.....
June	149	127	312	160	.....	.....
July	143	126	337	157	[1] 184	183
August	146	129	315	157	.....	.....
September	150	129	.....	157	.....	.....
October	154	129	.....	159	[1] 200	184
November	152	129	.....	163	.....	.....
December	154	128	.....	165	.....	.....
1918.						
January	157	129	.....	167	[1] 211	191
February	158	130	.....	169	.....	.....
March	151	131	.....	170	.....	.....
April	151	131	.....	169	[1] 232	218
May	155	132	.....	171	.....	.....
June	159	132	.....	172	.....	.....
July	164	131	.....	175	[1] 244	206
August	168	128	.....	181	.....	.....
September	175	128	.....	179	.....	.....
October	177	131	.....	182	[1] 260	238
November	179	133	.....	182	.....	.....
December	183	134	.....	184	.....	.....
1919.						
January	181	140	.....	186	.....	248
February	169	141	.....	181	.....	.....
March	172	.....	.....	176	.....	.....

[1] Quarter beginning that month.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND CERTAIN OTHER COUNTRIES—Concluded.

Year and month.	Great Britain: 21 foodstuffs; 600 towns. Weighted.	Italy: 7 foodstuffs; 40 cities (variable). Not weighted.	Netherlands: 29 articles; 40 cities. Not weighted.	New Zealand: 59 foodstuffs; 25 towns. Weighted.	Norway: 22 foodstuffs (variable); 20 towns (variable). Weighted.	Sweden: 21 articles; 44 towns. Weighted.
1914.						
July	100	100	[1] 100		100	100
October	112	104	[2] 107	100	.....	[3] 107
				102		
1915.						
January	118	108	114		.....	[3] 113
April	124	113	123	111	.....	[3] 121
July	132½	120	131	113	.....	[3] 124
October	140	127	128	112	[4] 129	[3] 128
				112		
1916.						
January	145	133	135		.....	[3] 130
April	149	132	142	116	.....	[3] 134
July	161	132	150	118	[5] 161	[3] 142
October	168	132	158	119	[4] 166	[3] 152
				120		
1917.						
January	187	144	165		.....	160
February	189	154	165	127	.....	166
March	192	161	169	126	183	170
April	194	164	170	126	.....	175
May	198	167	180	127	197	175
June	202	171	184	128	.....	175
July	204	172	188	128	.....	177
August	202	178	.....	127	214	181
September	206	188	.....	127	.....	187
October	197	.....	.....	129	.....	192
November	206	197	.....	130	230	200
December	205	199	.....	130	.....	212
				132		
1918.						
January	206	191	.....	133	241	221
February	208	221	.....	134	.....	227
March	207	247	.....	134	253	235
April	206	236	.....	137	.....	247
May	207	.....	.....	139	264	258
June	208	239	.....	139	271	261
July	210	253	.....	139	279	268
August	218	.....	.....	141	275	280
September	216	267	.....	141	270	284
October	229	.....	.....	142	276	310
November	233	.....	.....	144	275	320
December	229	.....	.....	150	275	330
1919.						
January	230	.....	.....	145	.....	339
February	230	.....	.....	.....	.....	334
March	220	.....	.....	.....	.....	.....

[1] January–July.
[2] August–December.
[3] Quarter beginning that month.
[4] November.
[5] August.

Prices of Meats and Breadstuffs During the War and the Readjustment Period.

THAT great increases have taken place in the prices of meats and breadstuffs since the beginning of the war in 1914 is a fact recognized by all. The precise extent to which prices have increased, however, is a matter of more or less speculation, owing to the difficulty of obtaining strictly comparable information. As indicative of the extent of price changes in these commodities during the war period and since, there is presented herewith a series of charts and tables showing fluctuations in the prices of four basic food materials—two animal and two vegetable—together with certain of their derived products, in selected markets, since January of 1913. For purpose of comparison, all prices have been reduced to the pound basis. Relative prices for the several articles, based on the average price in 1913 as 100, are also shown in the tables in order that the changes may be more easily compared.

From the chart and table for live cattle, fresh beef at wholesale, and round steak at retail it is seen that each of these commodities more than doubled in price in the six years from 1913 to 1919. Live cattle show a relatively higher increase in this period than either fresh beef at wholesale or round steak at retail, as is seen by reference to the last three columns of the table. Fresh beef at wholesale and round steak at retail increased in almost the same ratio during the latter part of the period.

In the chart and table for heavy hogs, smoked hams at wholesale, and sliced ham at retail it is shown that hogs and hams at wholesale doubled in price in the period from 1913 to 1919, while sliced ham at retail increased to a less extent. Measured by the price of hogs, the retail price of sliced ham was considerably lower in the early months of 1919 than in the corresponding months of 1913 or 1914. The same fact is observed when the prices of sliced ham are compared with those of smoked hams at wholesale. In all cases the sharp increases that have taken place in the price of meats since the beginning of 1917 are apparent.

The chart and table for wheat, flour, and bread show plainly the effect of the outbreak of war late in the summer of 1914 on the prices of these commodities. The high peak reached in the summer of 1917, before price control became effective, is also quite evident. In the price series for wheat flour, winter straights have been selected instead of patents because of the fact that this quality of flour conforms more closely to the standard prescribed by the United States Food Administration for the period when the ordinary grades of

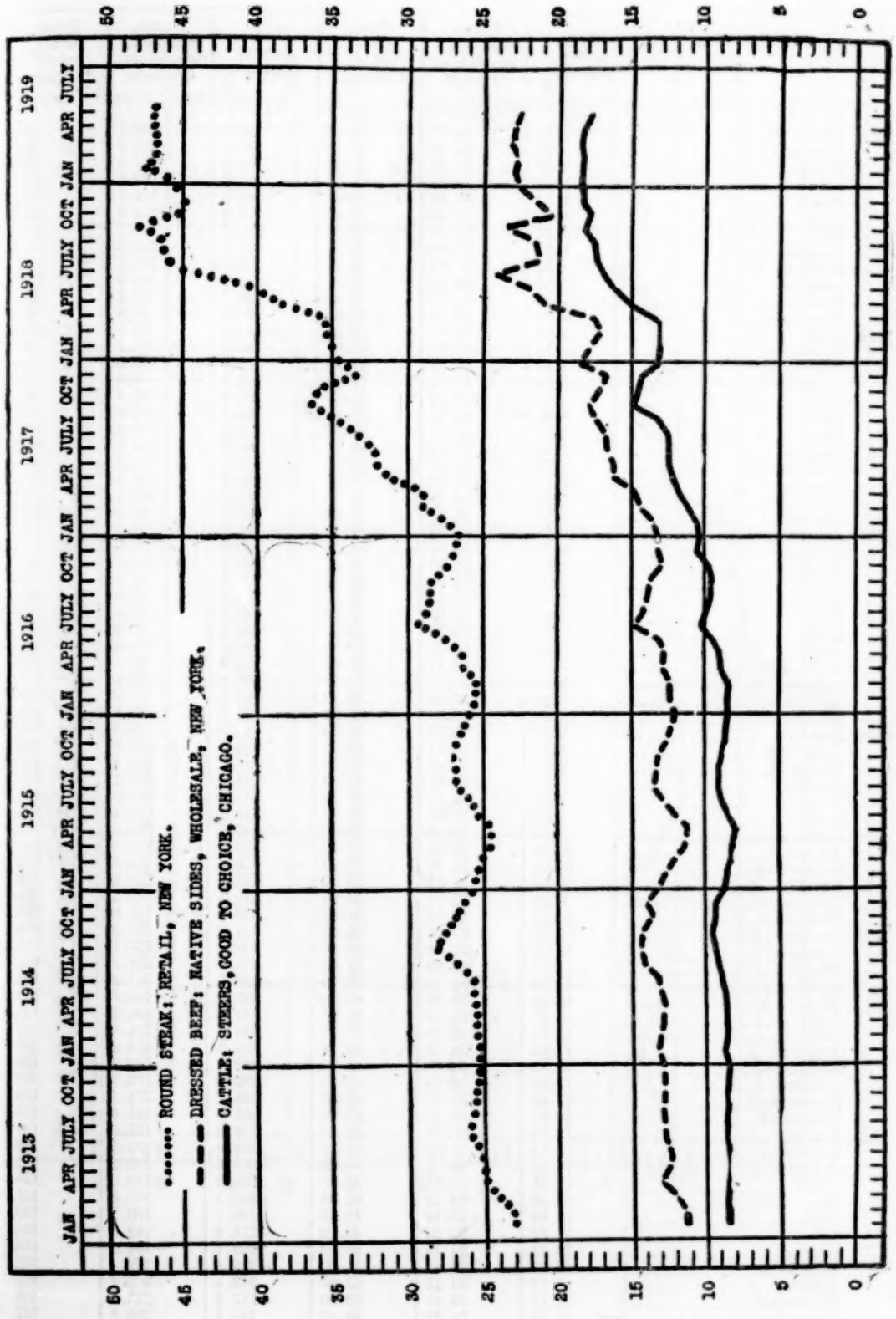
flour were not allowed to be marketed. The table of relative prices shows that, measured by the average price for 1913, bread at retail increased to a much smaller extent during the period than did wheat or flour at wholesale. The increase in the price differential between wheat and flour since the beginning of the war, and especially since the entry of this country into the war, is clearly seen in the chart.

The per pound prices of corn, corn meal at wholesale, and corn meal at retail in three separate localities are shown in the last table and chart. It is seen from these that there was little fluctuation in the prices until near the close of 1916, when increases in the price of wheat were reflected in corn and meal prices. The high peak for corn and meal at wholesale was reached in the second half of 1917, following the peak for wheat and flour prices. Corn meal at retail continued to advance until the spring of 1918, with a widening differential between its price and that of corn. Since April, 1918, prices of corn and meal have declined, the differential at the present time being still somewhat greater than in prewar months.

While definite conclusions can not be drawn from the limited information here presented, a study of the four tables and charts reveals few well-defined instances of lag between wholesale and retail prices. For meats, especially, changes in the price of basic materials appear to have been quite promptly reflected in retail prices. For breadstuffs, as might be expected, the response of retail prices to changes in the wholesale price was not so prompt. An examination of the figures leads to the conclusion, also, that so far as these commodities are concerned the ratio of prices of raw materials to those of their manufactured products has varied but little during the period under review.

PRICES OF LIVE CATTLE AT CHICAGO, FRESH BEEF AT WHOLESALE AT NEW YORK, AND ROUND STEAK AT RETAIL AT NEW YORK, JANUARY, 1913, TO MAY, 1919.

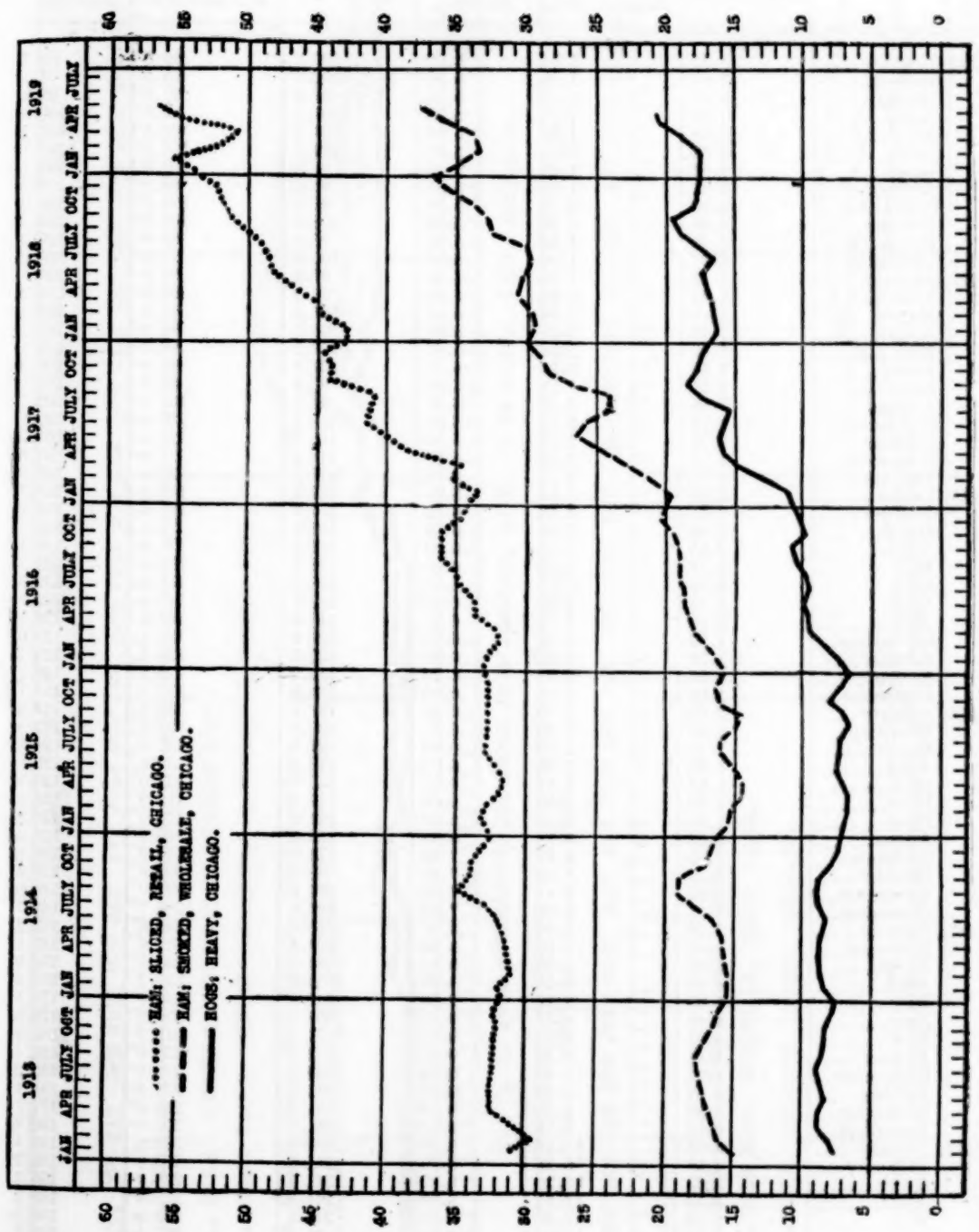
Year and month.	Average price per pound.			Relative price (average in 1913=100).		
	Cattle, good to choice steers, Chicago.	Fresh beef, native sides, wholesale, New York.	Round steak, retail, New York.	Cattle, good to choice steers, Chicago.	Fresh beef, native sides, wholesale, New York.	Round steak, retail, New York.
	Cents.	*Cents.*	*Cents.*			
1913: January	8.36	11.44	23.10	98.3	91.4	92.5
February	8.41	11.38	23.10	98.9	90.9	92.5
March	8.56	12.00	23.80	100.6	95.8	95.4
April	8.50	13.00	25.10	99.9	103.8	100.6
May	8.26	12.25	25.00	97.1	97.8	100.2
June	8.49	12.44	25.30	99.8	99.4	101.4
July	8.72	12.85	26.10	102.5	102.6	104.6
August	8.51	12.75	26.10	100.0	101.8	104.6
September	8.67	13.00	25.70	101.9	103.8	103.0
October	8.65	13.00	25.50	101.7	103.8	102.2
November	8.51	12.88	25.40	100.0	102.9	101.8
December	8.45	12.85	25.30	99.3	102.6	101.4
1914: January	8.76	13.19	25.10	103.0	105.4	100.6
February	8.64	13.06	25.50	101.6	104.3	102.2
March	8.66	12.80	25.40	101.8	102.2	101.8
April	8.71	12.75	25.50	102.4	101.8	102.2
May	8.73	13.00	25.70	102.6	103.8	103.0
June	8.80	13.05	25.80	103.4	104.2	103.4
July	9.22	14.06	26.90	108.4	112.3	107.8
August	9.52	14.44	28.40	111.9	115.3	113.8
September	9.73	14.25	27.80	114.4	113.8	111.4
October	9.43	13.56	27.10	110.9	108.3	108.6
November	9.41	14.00	26.50	110.6	111.8	106.2
December	8.92	13.40	25.90	104.8	107.0	103.8
1915: January	8.53	12.94	25.50	100.3	103.4	102.2
February	8.18	12.06	25.00	96.2	96.3	100.2
March	8.23	11.35	24.40	96.7	90.7	97.8
April	8.03	11.13	24.60	94.4	88.9	98.6
May	8.59	12.13	25.70	101.0	96.9	103.0
June	8.96	12.95	26.00	105.3	103.4	104.2
July	9.21	13.69	27.10	108.3	109.3	108.6
August	9.23	13.50	27.10	108.5	107.8	108.6
September	8.95	13.31	27.20	105.2	106.3	109.0
October	8.88	12.69	26.90	104.4	101.4	107.8
November	8.85	12.65	26.40	104.0	101.0	105.8
December	8.49	12.13	25.80	99.8	96.9	103.4
1916: January	8.67	12.38	25.50	101.9	98.9	102.2
February	8.47	12.33	25.40	99.6	98.5	101.8
March	8.97	12.88	26.30	105.4	102.9	105.4
April	9.12	12.81	26.40	107.2	102.3	105.8
May	9.46	13.13	27.80	111.2	104.9	111.4
June	10.26	15.00	29.30	120.6	119.8	117.4
July	9.99	14.25	28.90	117.4	113.8	115.8
August	9.85	14.00	28.80	115.8	111.8	115.4
September	9.80	13.88	28.70	115.2	110.9	115.0
October	9.91	13.00	27.70	116.5	103.8	111.0
November	10.35	13.25	27.10	121.7	105.8	108.6
December	10.29	13.25	26.90	121.0	105.8	107.8
1917: January	10.53	13.65	27.50	123.8	109.0	110.2
February	11.13	14.63	29.20	130.8	116.9	117.0
March	11.87	14.84	29.10	139.5	118.5	116.6
April	12.31	16.31	31.50	144.7	130.3	126.2
May	12.48	16.25	32.40	146.7	129.8	129.8
June	12.55	16.75	32.50	147.5	133.8	130.2
July	12.56	16.85	33.70	147.6	134.6	135.0
August	13.18	17.06	35.10	154.9	136.3	140.6
September	14.99	18.19	36.80	176.2	145.3	147.4
October	14.68	17.25	36.00	172.6	137.8	144.2
November	14.39	16.88	33.50	169.2	134.8	134.2
December	13.24	18.50	34.20	155.6	147.8	137.0
1918: January	15.11	17.90	35.20	154.1	143.0	141.0
February	13.08	17.25	35.60	153.7	137.8	142.6
March	13.23	17.50	35.70	155.5	139.8	143.0
April	15.18	21.00	38.40	178.4	167.7	153.8
May	16.42	22.00	40.60	193.0	175.7	162.7
June	17.18	24.31	45.20	201.9	194.2	181.1
July	17.63	21.40	46.30	207.2	170.9	185.5
August	17.83	21.63	46.70	209.6	172.8	187.1
September	18.41	23.63	48.00	216.4	188.7	192.3
October	17.86	20.35	45.40	209.9	162.5	181.9
November	18.16	21.63	44.80	213.5	172.8	179.5
December	18.36	22.75	45.40	215.8	181.7	181.9
1919: January	18.41	23.00	47.30	216.4	183.7	189.5
February	18.47	22.81	46.90	217.1	182.2	187.9
March	18.58	23.06	46.80	218.4	184.2	187.5
April	18.33	23.05	47.00	215.5	184.1	188.3
May	17.74	22.63	46.90	208.5	180.8	187.9


1913 1914 1915 1916 1917 1918 1919
JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY
ROUND STEAK; RETAIL, NEW YORK.
DRESSED BEEF; NATIVE SIDES, WHOLESALE, NEW YORK.
CATTLE; STEERS, GOOD TO CHOICE, CHICAGO.
50
45
40
35
30
25
20
15
10
5
0

[69]

PRICES OF HEAVY HOGS, SMOKED HAMS AT WHOLESALE, AND SLICED HAM AT RETAIL, CHICAGO, JANUARY, 1913, TO MAY, 1919.

Year and month.	Average price per pound.			Relative price (average in 1913=100).		
	Hogs, heavy, Chicago.	Hams, smoked, wholesale, Chicago.	Ham, sliced, retail, Chicago.	Hogs, heavy, Chicago.	Hams, smoked, wholesale, Chicago.	Hams, sliced, retail, Chicago.
	Cents.	*Cents.*	*Cents.*			
1913: January	7.47	14.97	30.80	89.3	90.1	96.8
February	8.08	16.10	29.50	96.6	96.9	92.7
March	8.87	16.50	31.30	106.0	99.3	98.4
April	8.94	16.55	32.50	106.9	99.6	102.1
May	8.42	16.88	32.50	100.6	101.6	102.1
June	8.63	17.44	32.40	103.2	104.9	101.8
July	9.01	17.80	32.30	107.7	107.1	101.5
August	8.35	17.88	32.20	99.8	107.6	101.2
September	8.43	17.04	32.20	100.7	102.5	101.2
October	8.31	16.44	32.00	99.4	98.9	100.6
November	7.92	16.16	32.30	94.7	97.2	101.5
December	7.87	15.60	31.80	94.1	93.9	99.9
1914: January	8.40	15.31	32.00	100.4	92.1	100.6
February	8.63	15.25	31.00	103.2	91.8	97.4
March	8.67	15.55	31.20	103.6	93.6	98.1
April	8.72	15.75	31.70	104.2	94.8	99.6
May	8.36	15.88	31.70	99.9	95.5	99.6
June	8.20	16.55	31.90	98.0	99.6	100.3
July	8.77	17.69	33.00	104.8	106.4	103.7
August	9.04	19.03	34.60	108.0	114.5	108.7
September	8.76	19.05	34.10	104.7	114.6	107.2
October	7.81	17.19	33.90	93.3	103.4	106.5
November	7.59	16.63	33.10	90.7	100.1	104.0
December	7.19	16.33	32.80	86.0	98.3	103.1
1915: January	6.99	15.38	33.30	83.6	92.5	104.7
February	6.76	15.25	33.00	80.8	91.8	103.7
March	6.76	14.25	32.20	80.8	85.7	101.2
April	7.25	14.38	31.70	86.7	86.5	99.6
May	7.55	15.13	32.30	90.3	91.0	101.5
June	7.46	15.85	33.20	89.2	95.4	104.3
July	7.28	16 10	32.80	87.0	96.9	103.1
August	6.84	14.95	32.80	81.8	90.0	103.1
September	7.14	14.47	32.80	85.4	87.1	103.1
October	8.12	16.13	32.80	97.1	97.1	103.1
November	6.89	16.25	32.80	82.4	97.8	103.1
December	6.66	15.56	33.30	79.6	93.6	104.7
1916: January	7.37	15.88	33.00	88.0	95.5	103.7
February	8.38	16.75	32.00	100.1	100.8	100.6
March	9.68	17.69	32.20	115.7	106.4	101.2
April	9.74	18.31	33.70	116.4	110.2	105.9
May	9.93	18.45	33.70	118.7	111.0	105.9
June	9.63	18.50	34.70	115.1	111.3	109.1
July	9.83	19.00	34.90	117.5	114.3	109.7
August	10.34	19.00	35.90	123.6	114.3	112.8
September	10.74	19.00	35.90	128.4	114.3	112.8
October	9.87	19.35	35.90	118.0	116.4	112.8
November	9.99	20.31	34.60	119.4	122.2	108.7
December	10.25	19.88	34.40	122.5	119.6	108.1
1917: January	10.96	19.45	33.30	131.0	117.0	104.7
February	12.58	21.13	35.40	150.4	127.1	111.3
March	14.79	22.88	34.30	176.8	137.7	107.8
April	15.80	24.50	38.20	188.8	147.4	120.1
May	16.09	26.55	40.30	192.3	159.7	126.7
June	15.71	25.94	41.60	187.8	156.1	130.7
July	15.46	23.95	41.40	184.8	144.1	130.1
August	17.33	24.13	40.70	207.2	145.2	127.9
September	18.33	26.75	43.90	219.1	160.9	138.0
October	17.59	28.60	43.90	210.3	172.1	138.0
November	17.46	29.00	44.50	208.7	174.5	139.9
December	16.85	30.16	42.90	201.4	181.5	134.8
1918: January	16.30	29.50	42.80	194.9	177.5	134.5
February	16.72	29.84	44.80	199.9	179.5	140.8
March	16.83	30.28	45.00	201.2	182.2	141.4
April	17.15	30.75	46.70	205.0	185.0	146.8
May	17.26	30.25	48.30	206.3	182.0	151.8
June	16.62	29.94	48.80	198.7	180.1	153.4
July	17.72	30.25	49.10	211.8	182.0	154.3
August	19.19	32.25	50.50	229.4	194.0	158.7
September	19.73	32.81	51.70	235.8	197.4	162.5
October	17.85	33.61	52.09	213.4	202.2	163.4
November	17.81	35.41	52.50	212.9	213.1	165.0
December	17.58	36.70	53.40	210.1	220.8	167.8
1919: January	17.54	34.94	55.30	209.7	210.2	173.8
February	17.64	33.38	52.10	210.9	200.8	163.8
March	18.96	33.81	50.80	226.6	203.4	159.6
April	20.50	35.95	54.60	245.1	216.3	171.6
May	20.76	37.69	56.60	248.2	226.8	177.9


HAM; SLICED, RETAIL, CHICAGO.
HAM; SMOKED, WHOLESALE, CHICAGO.
HOGS; HEAVY, CHICAGO.
1913 1914 1915 1916 1917 1918 1919
JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY
60 55 50 45 40 35 30 25 20 15 10 5 0

[71]

PRICES OF WHEAT, WHEAT FLOUR AT WHOLESALE, AND BREAD AT RETAIL, KANSAS CITY, JANUARY, 1913, TO MAY, 1919.

Year and month.	Average price per pound.			Relative price (average in 1913=100).		
	Wheat, No. 2, hard winter, Kansas City.	Wheat flour, winter straights, wholesale, Kansas City.	Bread, before baking, retail, Kansas City.	Wheat, No. 2, hard winter, Kansas City.	Wheat flour, winter straights, wholesale, Kansas City.	Bread, before baking, retail, Kansas City.
	Cents.	*Cents.*	*Cents.*			
1913: January	1.47	1.94	5.20	100.7	99.0	98.3
February	1.47	1.95	5.20	100.7	99.5	98.3
March	1.45	1.91	5.20	99.2	97.4	98.3
April	1.48	1.94	5.30	101.4	99.0	100.2
May	1.48	1.99	5.30	101.4	101.5	100.2
June	1.52	2.05	5.40	104.1	104.5	102.1
July	1.43	1.96	5.40	97.9	100.0	102.1
August	1.41	1.95	5.30	96.6	99.5	100.2
September	1.46	2.03	5.30	99.9	103.6	100.2
October	1.46	1.96	5.30	100.0	100.0	100.2
November	1.44	1.94	5.30	98.6	99.0	100.2
December	1.46	1.94	5.30	100.0	99.0	100.2
1914: January	1.43	1.94	5.40	97.9	99.0	102.1
February	1.45	1.94	5.30	99.2	99.0	100.2
March	1.48	1.94	5.40	101.4	99.0	102.1
April	1.46	1.94	5.40	100.0	99.0	102.1
May	1.49	1.94	5.40	102.1	99.0	102.1
June	1.53	1.91	5.30	104.8	97.4	100.2
July	1.36	1.71	5.40	93.2	87.2	102.1
August	1.45	2.10	5.40	99.3	107.1	102.1
September	1.74	2.53	5.40	119.2	129.1	102.1
October	1.70	2.38	5.50	116.4	121.4	104.0
November	1.79	2.39	5.50	122.6	121.9	104.0
December	1.87	2.55	5.70	128.1	130.1	107.7
1915: January	2.22	3.14	5.70	152.1	160.2	107.7
February	2.55	3.56	6.30	174.6	181.6	119.1
March	2.48	3.46	6.30	169.5	176.5	119.1
April	2.53	3.47	6.30	173.3	177.0	119.1
May	2.52	3.43	6.50	172.6	175.0	122.9
June	2.03	3.03	6.50	139.0	154.6	122.9
July	2.23	2.89	6.50	152.7	147.4	122.9
August	2.10	2.79	6.50	143.8	142.3	122.9
September	1.79	2.51	6.40	122.6	128.1	121.0
October	1.79	2.51	6.30	122.6	128.1	119.1
November	1.74	2.52	6.30	119.2	128.6	119.1
December	1.82	2.61	6.30	124.6	133.2	119.1
1916: January	2.00	2.79	6.20	137.0	142.3	117.2
February	2.04	2.50	6.50	139.7	127.6	122.9
March	1.78	2.50	6.60	121.9	127.6	124.8
April	1.89	2.56	6.60	129.4	130.6	124.8
May	1.85	2.47	6.60	126.7	126.0	124.8
June	1.70	2.33	6.60	116.4	118.9	124.8
July	1.81	2.45	6.60	124.0	125.0	124.8
August	2.32	3.33	6.80	158.9	169.9	128.5
September	2.55	3.61	7.40	174.6	184.2	139.8
October	2.75	3.99	7.30	288.3	203.6	138.0
November	3.10	4.45	7.60	212.3	227.0	143.6
December	2.87	3.98	7.50	196.6	203.1	141.7
1917: January	3.16	4.50	8.00	216.4	229 6	151.2
February	3.00	4.27	8.10	205.5	217 9	153.1
March	3.30	4.75	8.30	226.0	242.3	156.9
April	4.22	6.08	8.70	289.0	310.2	164.4
May	5.08	7.37	9.00	347.9	376.0	170.1
June	4.48	6.55	9.50	306.8	334.2	179.5
July	4.01	6.10	9.80	274.6	311.2	185.2
August	4.41	6.33	9.60	302.0	323.0	181.4
September	3.64	5.48	9.80	249.3	279.6	185.2
October	3.53	5.36	9.60	241.5	273.5	181.4
November	3.53	5.26	9.40	241.5	268.4	177.7
December	3.53	5.11	8.80	241.5	260.7	166.3
1918: January	3.53	[1] 5.15	8.70	241.5	262.8	164.4
February	3.53	[1] 5.23	8.90	241.5	266.8	168.2
March	3.53	[1] 5.26	8.80	241.5	268.4	166.3
April	3.53	[1] 5.31	8.90	241.5	270.9	168.2
May	3.53	[1] 5.36	8.90	241.5	273.5	168.2
June	3.53	[1] 5.36	8.80	241.5	273.5	166.3
July	3.75	[1] 5.40	8.90	256.8	275.5	168.2
August	3.60	[1] 5.24	8.80	246.6	267.3	166.3
September	3.60	[1] 5.18	8.80	246.6	264.3	166.3
October	3.61	[1] 5.17	8.80	247.2	263.8	166.3
November	3.60	[1] 5.23	8.80	246.6	266.8	166.3
December	3.77	[1] 5.20	8.80	258.2	265.3	166.3
1919: January	3.85	[1] 4.85	9.00	263.4	247.4	170.1
February	3.80	[1] 4.86	9.00	260.3	248.0	170.1
March	3.96	4.97	9.00	271.2	253.6	170.1
April	4.34	5.73	9.09	297.2	292.3	171.8
May	4.35	6.01	9.35	297.9	306.6	176.7

[1] U. S. Food Administration standard flour.

1913 1914 1915 1916 1917 1918 1919
JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY
BREAD: BEFORE BAKING, RETAIL, KANSAS CITY.
WHEAT FLOUR: WINTER STRAIGHTS, (1) WHOLESALE, KANSAS CITY.
WHEAT, NO.2 HARD WINTER, KANSAS CITY.
15
10
5
0
1913 1914 1916 1916 1917 1918 1919
JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY OCT JAN APR JULY
CORN MEAL: RETAIL, INDIANAPOLIS.
CORN MEAL: WHOLESALE, TERRE HAUTE.
CORN, CONTRACT GRADES, CHICAGO.
15
10
5
0

(1) U. S. Food Administration flour from January, 1918, to February, 1919, inclusive.

PRICES OF CORN AT CHICAGO, CORN MEAL AT WHOLESALE AT TERRE HAUTE, AND CORN MEAL AT RETAIL AT INDIANAPOLIS, JANUARY, 1913, TO MAY, 1919.

Year and month.	Average price per pound.			Relative price (average in 1913=100).		
	Corn, contract grades, cash, Chicago.	Corn meal, wholesale, Terre Haute.	Corn meal, retail, Indianapolis.	Corn, contract grades, cash, Chicago.	Corn meal, wholesale, Terre Haute.	Corn meal, retail, Indianapolis.
	Cents.	*Cents.*	*Cents.*			
1913: January	0.88	1.26	2.60	79.3	78.8	101.6
February	.90	1.28	2.60	81.1	80.0	101.6
March	.91	1.41	2.60	82.0	88.1	101.6
April	.99	1.59	2.50	89.2	99.4	97.7
May	1.02	1.60	2.50	91.9	100.0	97.7
June	1.07	1.64	2.40	96.4	102.5	93.8
July	1.11	1.69	2.60	100.0	105.6	101.6
August	1.32	1.82	2.60	118.9	113.8	101.6
September	1.34	1.88	2.60	120.7	117.5	101.6
October	1.25	1.73	2.50	112.6	108.1	97.7
November	1.29	1.64	2.60	116.2	102.5	101.6
December	1.26	1.66	2.60	113.5	103.8	101.6
1914: January	1.10	1.61	2.60	99.1	100.6	101.6
February	1.11	1.64	2.60	100.0	102.5	101.6
March	1.18	1.64	2.60	106.3	102.5	101.6
April	1.19	1.62	2.60	107.2	101.3	101.6
May	1.25	1.65	2.60	112.6	103.1	101.6
June	1.26	1.81	2.60	113.5	113.1	101.6
July	1.27	1.79	2.60	114.4	111.9	101.6
August	1.44	2.00	2.60	129.7	125.0	101.6
September	1.39	1.96	2.60	125.2	122.5	101.6
October	1.31	1.77	2.60	118.0	110.6	101.6
November	1.25	1.68	2.60	112.6	105.0	101.6
December	1.15	1.65	2.60	103.6	103.1	101.6
1915: January	1.28	1.62	2.60	115.3	101.3	101.6
February	1.35	1.70	2.70	121.6	106.3	105.5
March	1.29	1.66	2.70	116.2	103.8	105.5
April	1.34	1.70	2.60	120.7	106.3	101.6
May	1.37	1.71	2.70	123.4	106.9	105.6
June	1.32	1.64	2.70	118.9	102.5	105.5
July	1.40	1.75	2.70	126.1	109.4	105.5
August	1.41	1.70	2.70	127.0	106.3	105.5
September	1.30	1.59	2.70	117.1	99.4	105.5
October	1.13	1.43	2.70	101.8	89.4	105.5
November	1.16	1.40	2.70	104.5	87.5	105.5
December	1.28	1.53	2.70	115.3	95.6	105.5
1916: January	1.36	1.65	2.70	122.5	103.1	105.5
February	1.36	1.71	2.70	122.5	106.9	105.5
March	1.32	1.73	2.70	118.9	108.1	105.5
April	1.36	1.85	2.70	122.5	115.6	105.5
May	1.33	1.77	2.70	119.8	110.6	105.5
June	1.32	1.79	2.60	118.9	111.9	101.6
July	1.44	1.98	2.60	129.7	123.8	101.6
August	1.53	2.09	2.70	137.8	130.6	105.5
September	1.55	2.08	2.90	139.6	130.0	113.3
October	1.53	2.22	3.40	137.8	138.8	132.3
November	1.75	2.51	3.40	157.6	156.9	132.3
December	1.64	2.39	3.40	147.8	149.4	132.8
1917: January	1.75	2.49	3.50	157.6	155.6	136.7
February	1.81	2.53	3.50	163.1	158.1	136.7
March	2.00	2.79	3.50	180.2	174.4	136.7
April	2.49	3.76	4.20	224.3	235.0	164.1
May	2.92	4.13	5.00	263.1	258.1	195.3
June	3.06	4.13	5.10	275.7	258.1	199.2
July	3.65	4.88	5.30	328.8	305.0	207.0
August	3.43	5.56	5.70	309.0	347.5	222.7
September	3.69	5.31	5.80	332.4	331.9	226.6
October	3.51	5.12	5.90	316.2	320.0	230.5
November	3.67	5.07	6.50	330.6	316.9	253.9
December	3.05	4.86	6.30	274.8	303.8	246.1
1918: January	3.17	4.84	6.30	285.6	302.5	246.1
February	3.12	5.45	6.50	281.2	340.6	253.9
March	3.08	5.15	6.70	277.5	321.9	261.7
April	2.99	5.35	6.90	269.4	334.4	269.5
May	2.92	4.59	6.50	263.1	286.9	253.9
June	2.85	4.45	6.10	256.8	278.1	238.3
July	2.99	4.83	6.20	269.4	301.9	242.2
August	3.03	4.45	6.30	273.0	278.1	246.1
September	2.85	3.99	6.30	256.8	249.4	246.1
October	2.47	3.40	6.20	222.5	212.5	242.2
November	2.41	3.05	5.70	217.1	190.6	222.7
December	2.58	3.24	5.50	232.4	202.5	214.8
1919: January	2.50	3.15	5.40	225.2	196.9	210.9
February	2.31	2.84	5.30	208.1	177.5	207.0
March	2.65	3.15	5.20	238.7	196.9	203.0
April	2.87	3.53	5.20	258.6	220.6	203.1
May	3.16	3.81	5.30	284.7	238.1	207.0

Cost of Living in the United States.

CONTINUING the presentation in the May and June numbers of the LABOR REVIEW of data relating to the cost of living in industrial centers, the following table shows the results of the investigation in 49 localities in the Southern and Western sections of the United States. The period covered by the investigation in these cities varied from the year ending September 30, 1918, to the year ending February 28, 1919.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS.

ASTORIA, OREG.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900																
$900 and under $1,200	5	4.6	2.62	$430.18	$189.97	$143.46	$59.83	$61.36	$184.26	$1,069.06	4	$83.75	1	$249.00	.....	+$17.20
$1,200 and under $1,500	22	4.5	2.87	497.40	247.85	[1] 180.51	[1] 69.60	81.95	312.11	1,384.83	16	108.08	6	320.17	.....	− 8.72
$1,500 and under $1,800	24	4.8	3.22	522.15	295.74	[2] 213.01	[2] 72.14	123.72	337.53	1,551.40	17	182.11	7	146.40	.....	+ 86.30
$1,800 and under $2,100	17	5.1	3.27	570.46	308.49	183.91	71.39	122.82	328.16	1,585.24	15	360.42	2	92.75	.....	+307.11
$2,100 and under $2,500	6	5.8	3.74	674.93	379.09	211.04	79.47	137.34	536.85	2,018.73	4	440.43	2	150.73	.....	+243.38
$2,500 and over	1	6.0	4.85	919.80	492.30	([3])	([3])	50.15	510.90	2,265.20	1	464.00	.....	.....	.....	+464.00
Total	75	4.9	3.15	537.24	286.82	[4] 191.21	[4] 70.96	107.22	335.99	1,524.96	57	224.43	18	204.54	.....	+121.47
	PER CENT.															
Under $900																
$900 and under $1,200	6.7	.....	.....	40.2	17.8	13.4	5.6	5.7	17.2	100.0	80.0	.....	20.0	.....	.....	.....
$1,200 and under $1,500	29.3	.....	.....	35.9	17.9	[1] 12.0	[1] 4.6	5.9	22.5	100.0	72.7	.....	27.3	.....	.....	.....
$1,500 and under $1,800	32.0	.....	.....	33.7	19.1	[2] 14.1	[2] 4.8	8.0	21.8	100.0	70.8	.....	29.2	.....	.....	.....
$1,800 and under $2,100	22.7	.....	.....	36.0	19.5	11.6	4.5	7.7	20.7	100.0	88.2	.....	11.8	.....	.....	.....
$2,100 and under $2,500	8.0	.....	.....	33.4	18.8	10.5	3.9	6.8	26.6	100.0	66.7	.....	33.3	.....	.....	.....
$2,500 and over	1.3	.....	.....	40.6	21.7	([3])	([3])	2.2	22.6	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	35.2	18.8	[4] 12.7	[4] 4.7	7.0	22.0	100.0	76.0	.....	24.0	.....	.....	.....

ATLANTA, GA.: White families.

Under $900	9	4.0	2.30	$360.90	$125.45	$69.37	$56.05	$41.49	$150.12	$803.39	1	$100.00	6	$82.50	2	−$43.89
$900 and under $1,200	46	4.3	2.72	440.70	165.01	105.22	68.20	67.74	192.72	1,039.59	22	74.57	12	65.15	12	+ 18.67
$1,200 and under $1,500	48	5.3	3.37	525.37	230.94	146.17	80.91	60.53	286.30	1,330.22	27	95.39	15	99.61	6	+ 22.53
$1,500 and under $1,800	30	5.2	3.39	547.07	294.35	169.02	78.26	101.37	337.70	1,527.77	23	116.25	5	68.85	2	+ 77.65
$1,800 and under $2,100	15	6.1	4.46	671.00	402.28	159.08	81.13	84.65	456.36	1,854.50	10	148.92	3	145.96	2	+ 70.09
$2,100 and under $2,500	8	6.1	4.93	750.37	479.38	231.24	93.71	109.53	447.93	2,112.15	6	176.37	2	142.65	.....	+ 96.62
$2,500 and over	4	6.3	4.62	726.14	551.92	214.32	94.33	165.06	569.42	2,321.19	3	501.93	1	73.27	.....	+358.13
Total	160	5.1	3.34	525.77	254.45	141.53	76.36	76.52	292.48	1,367.09	92	120.03	44	88.90	24	+ 44.57

Total	160	5.1	3.34	525.77	254.45	141.53	76.36	76.52	292.48	1,367.09	92	120.03	44	88.90	24	+ 44.57

PER CENT.

Under $900	5.6	.....	.....	44.9	15.6	8.6	7.0	5.2	18.7	100.0	11.1	.....	66.7	.....	22.2	.....
$900 and under $1,200	28.8	.....	.....	42.4	15.9	10.1	6.6	6.5	18.5	100.0	47.8	.....	26.1	.....	26.1	.....
$1,200 and under $1,500	30.0	.....	.....	39.5	17.4	11.0	6.1	4.6	21.5	100.0	56.3	.....	31.3	.....	12.5	.....
$1,500 and under $1,800	18.8	.....	.....	35.8	19.3	11.1	5.1	6.6	22.1	100.0	76.7	.....	16.7	.....	6.7	.....
$1,800 and under $2,100	9.4	.....	.....	36.2	21.7	8.6	4.4	4.6	24.6	100.0	66.7	.....	20.0	.....	13.3	.....
$2,100 and under $2,500	5.0	.....	.....	35.5	22.7	10.9	4.4	5.2	21.2	100.0	75.0	.....	25.0	.....	.....	.....
$2,500 and over	2.5	.....	.....	31.3	23.8	9.2	4.1	7.1	24.5	100.0	75.0	.....	25.0	.....	.....	.....
Total	100.0	.....	.....	38.5	18.6	10.4	5.6	5.6	21.4	100.0	57.5	.....	27.5	.....	15.0	.....

ATLANTA, GA.: Colored families.

Under $900	20	3.7	2.67	$369.59	$111.99	$84.50	$55.56	$44.20	$126.62	$792.46	10	$42.78	4	$52.34	6	+$10.92
$900 and under $1,200	21	4.9	3.14	467.95	173.85	97.72	59.91	46.82	189.08	1,035.33	13	49.07	3	35.63	5	+ 25.29
$1,200 and under $1,500	13	5.1	3.71	595.81	291.74	105.50	67.47	45.02	287.20	1,392.74	5	88.36	6	134.17	2	− 27.94
$1,500 and under $1,800	1	7.0	5.60	690.19	434.62	113.25	95.06	76.35	231.54	1,641.01	.....	.....	1	18.25	.....	− 18.25
$1,800 and under $2,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	55	4.5	3.15	466.45	183.96	95.04	60.75	45.98	190.33	1,042.51	28	53.84	14	81.40	13	+ 6.69

PER CENT.

Under $900	36.4	.....	.....	46.6	14.1	10.7	7.0	5.6	16.0	100.0	50.0	.....	20.0	.....	30.0	.....
$900 and under $1,200	38.2	.....	.....	45.2	16.8	9.4	5.8	4.5	18.3	100.0	61.9	.....	14.3	.....	23.8	.....
$1,200 and under $1,500	23.6	.....	.....	42.8	20.9	7.6	4.8	3.2	20.6	100.0	38.5	.....	46.2	.....	15.4	.....
$1,500 and under $1,800	1.8	.....	.....	42.1	26.5	6.9	5.8	4.7	14.1	100.0	.....	.....	100.0	.....	.....	.....
$1,800 and under $2,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	44.7	17.6	9.1	5.8	4.4	18.3	100.0	50.9	.....	25.5	.....	23.6	.....

[1] Not including 2 families in which rent is combined with fuel and light.
[2] Not including 3 families in which rent is combined with fuel and light.
[3] Rent is combined with fuel and light.
[4] Not including 6 families in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

BAKERSFIELD, CALIF.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900																
$900 and under $1,200	10	5.5	3.29	$487.88	$152.64	$172.98	$51.39	$55.92	$159.32	$1,080.13	6	$78.84	4	$53.82		+$25.78
$1,200 and under $1,500	20	4.5	3.22	489.72	197.57	[1] 219.18	[1] 53.85	55.30	299.32	1,310.12	15	123.76	5	134.15		+ 59.28
$1,500 and under $1,800	28	4.6	3.13	513.01	233.65	[2] 232.43	[2] 60.24	83.88	436.04	1,554.90	18	189.32	7	189.19	3	+ 74.41
$1,800 and under $2,100	14	4.1	2.96	563.05	294.96	262.57	66.13	111.44	448.21	1,746.36	13	182.81	1	150.00		+159.04
$2,100 and under $2,500	2	6.0	5.01	624.13	314.70	180.00	53.10	197.02	491.00	1,859.95	2	400.20				+400.20
$2,500 and over	3	4.3	3.20	603.35	337.54	281.25	51.64	112.77	1,050.20	2,436.75	2	409.06	1	48.20		+256.64
Total	77	4.6	3.19	519.20	231.06	[3] 227.26	[2] 57.98	81.90	392.16	1,506.75	56	173.79	18	133.81	3	+ 95.11
	PER CENT.															
Under $900																
$900 and under $1,200	13.0			45.2	14.1	16.0	4.8	5.2	14.7	100.0	60.0		40.0			
$1,200 and under $1,500	26.0			37.4	15.1	[1] 16.8	[1] 4.1	4.2	22.8	100.0	75.0		25.0			
$1,500 and under $1,800	36.4			33.0	15.0	[2] 14.9	[2] 3.9	5.4	28.0	100.0	64.3		25.0		10.7	
$1,800 and under $2,100	18.2			32.2	16.9	15.0	3.8	6.4	25.7	100.0	92.9		7.1			
$2,100 and under $2,500	2.6			33.6	16.9	9.7	2.9	10.6	26.4	100.0	100.0					
$2,500 and over	3.9			24.8	13.9	11.5	2.1	4.6	43.1	100.0	66.7		33.3			
Total	100.0			34.5	15.3	[3] 15.1	[3] 3.8	5.4	26.0	100.0	72.7		23.4		3.9	

BIRMINGHAM, ALA.: White families.

Under $900	2	4.5	2.36	$438.64	$117.57	$88.00	$67.38	$19.95	$124.82	$856.34	1	$44.72			1	+$22.36
$900 and under $1,200	10	5.1	3.29	475.20	150.46	155.96	59.12	36.65	252.64	1,130.03	6	70.97	3	$207.84	1	− 19.77
$1,200 and under $1,500	37	4.6	2.91	475.81	182.03	161.06	65.78	73.87	263.95	1,222.50	30	166.52	4	73.88	3	+127.03
$1,500 and under $1,800	42	5.1	3.43	598.54	246.25	185.12	65.97	61.33	357.40	1,514.62	36	188.36	5	122.77	1	+146.83
$1,800 and under $2,100	31	5.4	3.60	675.85	306.37	212.01	84.39	83.43	375.02	1,737.07	25	228.93	4	81.16	2	+174.15
$2,100 and under $2,500	20	5.4	3.33	657.96	352.93	252.74	84.07	160.90	533.51	2,042.11	17	300.17	3	116.80		+237.63
$2,500 and over	9	5.3	4.12	907.61	436.37	214.94	86.21	114.70	620.80	2,380.64	7	529.90	2	61.97		+398.37
Total	151	5.1	3.34	600.34	260.27	192.26	72.88	83.13	367.13	1,576.00	122	219.53	21	111.04	8	+161.92

Total	151	5.1	3.34	600.34	260.27	192.26	72.88	83.13	367.13	1,576.00	122	219.53	21	111.04	8	+161.92

PER CENT.

Under $900	1.3	.....	.....	51.2	13.7	10.3	7.9	2.3	14.6	100.0	50.0	.....	.....	.....	50.0	.....
$900 and under $1,200	6.6	.....	.....	42.1	13.3	13.8	5.2	3.2	22.4	100.0	60.0	.....	30.0	.....	10.0	.....
$1,200 and under $1,500	24.5	.....	.....	38.9	14.9	13.2	5.4	6.0	21.6	100.0	81.1	.....	10.8	.....	8.1	.....
$1,500 and under $1,800	27.8	.....	.....	39.5	16.3	12.2	4.4	4.0	23.6	100.0	85.7	.....	11.9	.....	2.4	.....
$1,800 and under $2,100	20.5	.....	.....	38.9	17.6	12.2	4.9	4.8	21.6	100.0	80.6	.....	12.9	.....	6.5	.....
$2,100 and under $2,500	13.2	.....	.....	32.2	17.3	12.4	4.1	7.9	26.1	100.0	85.0	.....	15.0	.....	.....	.....
$2,500 and over	6.0	.....	.....	38.1	18.3	9.0	3.6	4.8	26.1	100.0	77.8	.....	22.2	.....	.....	.....
Total	100.0	.....	.....	38.1	16.5	12.2	4.6	5.3	23.3	100.0	80.8	.....	13.9	.....	5.3	.....

BIRMINGHAM, ALA.: Colored families.

Under $900	9	4.2	2.63	$362.54	$102.65	$75.89	$53.44	$38.45	$137.13	$770.00	7	$25.57	2	$13.00	.....	+$17.00
$900 and under $1,200	27	5.1	3.67	487.86	170.65	92.97	54.82	33.96	186.45	1,026.71	16	67.22	6	35.85	5	+ 31.87
$1,200 and under $1,500	11	5.0	3.45	523.11	214.89	122.20	65.48	76.44	280.23	1,282.36	6	65.54	2	38.22	3	+ 28.80
$1,500 and under $1,800	4	6.0	4.56	646.12	275.09	133.38	70.55	62.89	290.78	1,478.80	4	170.55	.....	.....	.....	+170.55
$1,800 and under $2,100	3	8.0	5.92	846.38	261.19	121.00	52.53	100.17	421.70	1,802.97	1	286.00	1	35.00	1	+ 83.67
$2,100 and under $2,500	1	9.0	6.73	822.39	490.24	144.00	83.60	135.82	543.52	2,219.57	1	45.58	.....	.....	.....	+ 45.58
$2 500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	55	5.2	3.70	511.55	186.72	101.42	58.25	50.76	224.05	1,132.74	35	76.05	11	32.05	9	+ 41.98

PER CENT.

Under $900	16.4	.....	.....	47.1	13.3	9.9	6.9	5.0	17.8	100.0	77.8	.....	22.2	.....	.....	.....
$900 and under $1,200	49.1	.....	.....	47.5	16.6	9.1	5.3	3.3	18.2	100.0	59.3	.....	22.2	.....	18.5	.....
$1,200 and under $1,500	20.0	.....	.....	40.8	16.8	9.5	5.1	6.0	21.9	100.0	54.5	.....	18.2	.....	27.3	.....
$1,500 and under $1,800	7.3	.....	.....	43.7	18.6	9.0	4.8	4.3	19.7	100.0	100.0	.....	.....	.....	.....	.....
$1,800 and under $2,100	5.5	.....	.....	46.9	14.5	6.7	2.9	5.6	23.4	100.0	33.3	.....	33.3	.....	33.3	.....
$2,100 and under $2,500	1.8	.....	.....	37.1	22.1	6.5	3.8	6.1	24.5	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	45.2	16.5	9.0	5.1	4.5	19.8	100.0	63.6	.....	20.0	.....	16.4	.....

[1] Not including 1 family, in which rent is combined with fuel and light.
[2] Not including 2 families, in which rent is combined with fuel and light.
[3] Not including 3 families, in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

BISBEE, ARIZ.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900																
$900 and under $1,200	1	5.0	2.60	$658.58	$165.98	$204.00	$42.72	$8.55	$85.37	$1,165.20	1	$6.00				+ $6.00
$1,200 and under $1,500																
$1,500 and under $1,800	9	4.4	2.73	612.97	266.59	218.94	95.33	104.36	349.30	1,647.49	8	114.87	1	107.46		+ 90.16
$1,800 and under $2,100	32	4.8	3.06	654.85	272 32	232.96	98.91	93.04	363.89	1,715.98	29	253.39	3	46.92		+225.24
$2,100 and under $2,500	25	5.4	3.58	720.04	336.76	285.21	98.90	72.34	508.09	2,021.34	22	302.53	3	121.89		+251.60
$2,500 and over	13	5.0	3.96	775.28	397.85	308.35	133.49	181.13	674.23	2,470.35	10	396.40	3	170.02		+265.69
Total	80	5.0	3.33	690.13	310.88	259.60	103.42	101.10	454.26	1,919.40	70	269.90	10	112.39		+222.11
	PER CENT.															
Under $900																
$900 and under $1,200	1.3			56.5	14.2	17.5	3.7	0.7	7.3	100.0	100.0					
$1,200 and under $1,500																
$1,500 and under $1,800	11.3			37.2	16.2	13.3	5.8	6.3	21.2	100.0	88.9		11.1			
$1,800 and under $2,100	40.0			38.2	15.9	13.6	5.8	5.4	21.2	100.0	90.6		9.4			
$2,100 and under $2,500	31.3			35.6	16.7	14.1	4.9	3.6	25.1	100.0	88.0		12.0			
$2,500 and over	16.3			31.4	16.1	12.5	5.4	7.3	27.3	100.0	76.9		23.1			
Total	100.0			36.0	16.2	13.5	5.4	5.3	23.7	100.0	87.5		12.5			

BUTTE, MONT.

Under $900																
$900 and under $1,200	1	4.0	2.70	$491.75	$133.85	$192.00	$106.40	$7.85	$90.65	$1,022.50			1	$90.00		−$90.00
$1,200 and under $1,500	7	4.3	3.13	601.16	175.55	207.86	106.26	50.42	351.67	1,492.92	1	65.80	6	139.59		−110.25
$1,500 and under $1,800	37	4.8	3.08	610.33	266.42	[1] 221.31	[1] 121.40	95.88	318.26	1,634.93	21	125.93	15	148.18	1	+ 11.40
$1,800 and under $2,100	25	4.4	3.00	613.86	292.34	306.88	122.60	127.98	412.21	1,875.87	17	208.62	8	175.24		+ 85.79
$2,100 and under $2,500	23	4.4	2.93	596.50	342.27	342.83	125.36	122.84	508.28	2,038.08	20	284.65	3	82.22		+236.80
$2,500 and over	9	5.3	3.90	788.38	413.10	376.67	136.19	135.49	632.31	2,482.14	8	315.06	1	448.30		+230.24
Total	102	4.6	3.10	622.00	295.28	[1] 282.78	[1] 122.72	109.34	411.91	1,843.90	67	215.98	34	154.33	1	+ 90.42

Total	102	4.6	3.10	622.00	295.28	[1] 282.78	[1] 122.72	109.34	411.91	1,843.90	67	215.98	34	154.33	1	+ 90.42

PER CENT.

Under $900																
$900 and under $1,200	1.0			48.1	13.1	18.8	10.4	0.8	8.9	100.0			100.0			
$1,200 and under $1,500	6.9			40.3	11.8	13.9	7.1	3.4	23.6	100.0	14.3		85.7			
$1,500 and under $1,800	36.3			37.3	16.3	[1] 13.5	[1] 7.4	5.9	19.5	100.0	56.8		40.5		2.7	
$1,800 and under $2,100	24.5			32.7	15.6	16.4	6.5	6.8	22.0	100.0	68.0		32.0			
$2,100 and under $2,500	22.5			29.3	16.8	16.8	6.2	6.0	24.9	100.0	87.0		13.0			
$2,500 and over	8.8			31.8	16.6	15.2	5.5	5.5	25.5	100.0	88.9		11.1			
Total	100.0			33.7	16.0	[1] 15.3	[1] 6.6	5.9	22.3	100.0	65.7		33.3		1.0	

CHARLESTON, S. C.

Under $900	2	4.5	3.88	$407.59	$129.49	$138.00	$51.08	$5.03	$155.96	$887.14	1	$13.08	1	$80.75		−$33.84
$900 and under $1,200	9	4.2	3.13	469.78	168.94	192.00	68.12	60.78	297.07	1,256.69	4	37.95	5	248.66		−121.28
$1,200 and under $1,500	24	4.5	3.04	560.61	226.92	170.59	74.55	82.86	337.80	1,453.33	8	81.03	14	211.61	2	− 96.43
$1,500 and under $1,800	26	5.3	3.24	580.80	281.27	194.00	70.50	68.60	369.95	1,564.51	19	132.12	6	168.74	1	+ 57.61
$1,800 and under $2,100	21	5.3	3.48	675.82	321.56	238.11	79.57	73.30	464.98	1,853.34	17	199.57	4	249.86		+113.97
$2,100 and under $2,500	13	5.8	3.96	712.04	372.07	243.50	102.76	101.14	564.60	2,096.11	10	198.32	3	176.42		+111.84
$2,500 and over	5	8.2	5.40	970.53	454.85	252.85	99.52	83.35	688.43	2,549.52	4	319.42	1	273.15		+200.91
Total	100	5.2	3.45	619.00	284.02	205.72	78.42	75.84	412.58	1,675.59	63	158.37	34	208.85	3	+ 28.76

PER CENT.

Under $900	2.0			45.9	14.6	15.6	5.8	0.6	17.6	100.0	50.0		50.0			
$900 and under $1,200	9.0			37.4	13.4	15.3	5.4	4.8	23.6	100.0	44.4		55.6			
$1,200 and under $1,500	24.0			38.6	15.6	11.7	5.1	5.7	23.2	100.0	33.3		58.3		8.3	
$1,500 and under $1,800	26.0			37.1	18.0	12.4	4.5	4.3	23.6	100.0	73.1		23.1		3.8	
$1,800 and under $2,100	21.0			36.5	17.4	12.8	4.3	4.0	25.1	100.0	81.0		19.0			
$2,100 and under $2,500	13.0			34.0	17.8	11.6	4.9	4.8	26.9	100.0	76.9		23.1			
$2,500 and over	5.0			38.1	17.8	9.9	3.9	3.3	27.0	100.0	80.0		20.0			
Total	100.0			36.9	17.0	12.3	4.7	4.5	24.6	100.0	63.0		34.0		3.0	

[1] Not including 1 family in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

CHARLOTTE, N. C.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	1	3.0	1.95	$290.07	$167.61	$153.00	$75.19	$28.50	$255.58	$969.95	.....	.....	1	$80.00	.....	−$80.00
$900 and under $1,200	22	4.9	3.13	444.48	142.78	[1] 100.63	[1] 69.54	48.31	229.88	1,027.01	9	$52.71	8	65.09	5	− 2.11
$1,200 and under $1,500	28	5.7	3.75	565.31	222.71	[1] 143.47	[1] 84.40	67.10	249.92	1,325.72	15	95.72	9	134.65	4	+ 8.00
$1,500 and under $1,800	16	6.2	3.81	623.04	240.18	153.93	86.72	87.24	386.18	1,577.30	8	129.20	7	68.21	1	+ 34.76
$1,800 and under $2,100	9	6.2	3.69	612.38	336.88	[2] 181.81	[2] 100.34	67.44	446.19	1,728.56	7	305.04	2	143.00	.....	+205.48
$2,100 and under $2,500	3	5.7	3.91	598.65	345.02	203.72	77.27	168.19	500.47	1,893.32	3	261.96	.....	.....	.....	+261.96
$2,500 and over	2	9.0	6.33	812.74	574.33	224.00	68.93	127.10	487.99	2,295.08	2	315.47	.....	.....	.....	+315.47
Total	81	5.7	3.63	553.07	229.67	[3] 143.06	[3] 81.85	70.76	308.43	1,379.61	44	147.64	27	95.41	10	+ 48.39
	PER CENT.															
Under $900	1.2	.....	.....	29.9	17.3	15.8	7.8	2.9	26.3	100.0	.....	.....	100.0	.....	.....	.....
$900 and under $1,200	27.2	.....	.....	43.3	13.9	[1] 9.7	[1] 6.7	4.7	22.4	100.0	40.9	.....	36.4	.....	22.7	.....
$1,200 and under $1,500	34.6	.....	.....	42.6	16.8	[1] 10.9	[1] 6.4	5.1	18.9	100.0	53.6	.....	32.1	.....	14.3	.....
$1,500 and under $1,800	19.8	.....	.....	39.5	15.2	9.8	5.5	5.5	24.5	100.0	50.0	.....	43.8	.....	6.3	.....
$1,800 and under $2,100	11.1	.....	.....	35.4	19.5	[2] 10.3	[2] 5.7	3.9	25.8	100.0	77.8	.....	22.2	.....	.....	.....
$2,100 and under $2,500	3.7	.....	.....	31.6	18.2	10.8	4.1	8.9	26.4	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	2.5	.....	.....	35.4	25.0	9.8	3.0	5.5	21.3	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	40.1	16.6	[3] 10.3	[3] 5.9	5.1	22.4	100.0	54.3	.....	33.3	.....	12.3	.....

CORSICANA, TEX.

Under $900	11	4.3	2.94	$355.40	$127.53	$98.12	$55.99	$31.17	$119.44	$787.64	8	$46.27	2	$201.03	1	− $2.90
$900 and under $1,200	18	5.6	3.12	508.18	178.46	119.83	63.32	34.02	183.84	1,087.66	10	56.84	8	123.41	.....	− 23.27
$1,200 and under $1,500	23	5.4	3.40	532.61	201.54	143.35	63.90	57.16	287.96	1,286.52	19	115.09	2	78.38	2	+ 88.26
$1,500 and under $1,800	8	5.4	3.54	505.56	279.57	217.25	65.18	65.13	380.29	1,512.98	6	224.89	2	112.13	.....	+140.64
$1,800 and under $2,100	12	5.9	4.06	628.19	276.93	191.17	70.89	87.53	412.63	1,667.34	12	265.28	.....	.....	.....	+265.28
$2,100 and under $2,500	3	8.3	4.73	769.66	408.04	174.00	76.70	148.94	307.00	1,884.34	3	268.82	.....	.....	.....	+268.82
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	75	5.5	3.44	522.65	213.79	147.83	64.37	57.18	268.81	1,274.62	58	145.94	14	126.45	3	+ 89.26

PER CENT.

Under $900	14.7	.....	.....	45.1	16.2	12.5	7.1	4.0	15.2	100.0	72.7	.....	18.2	.....	9.1	.....
$900 and under $1,200	24.0	.....	.....	46.7	16.4	11.0	5.8	3.1	16.9	100.0	55.6	.....	44.4	.....	.....	.....
$1,200 and under $1,500	30.7	.....	.....	41.4	15.7	11.1	5.0	4.4	22.4	100.0	82.6	.....	8.7	.....	8.7	.....
$1,500 and under $1,800	10.7	.....	.....	33.4	18.5	14.4	4.3	4.3	25.1	100.0	75.0	.....	25.0	.....	.....	.....
$1,800 and under $2,100	16.0	.....	.....	37.7	16.6	11.5	4.3	5.2	24.7	100.0	100.0	.....	.....	.....	.....	.....
$2,100 and under $2,500	4.0	.....	.....	40.8	21.7	9.2	4.1	7.9	16.3	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	41.0	16.8	11.6	5.0	4.5	21.1	100.0	77.3	.....	18.7	.....	4.0	.....

CRIPPLE CREEK DISTRICT, COLO.

Under $900	1	3.0	2.76	$369.29	$135.55	$60.00	$80.50	$11.05	$197.10	$853.49	1	$27.71	.....	.....	.....	+$27.71
$900 and under $1,200	8	4.5	3.16	495.36	151.77	107.50	114.57	35.28	248.88	1,153.35	3	87.12	5	$158.04	.....	− 66.11
$1,200 and under $1,500	38	4.3	3.33	553.81	212.03	104.44	113.71	38.78	304.13	1,326.89	26	97.93	12	120.51	.....	+ 28.95
$1,500 and under $1,800	22	4.4	3.12	580.36	248.25	130.58	111.79	53.59	389.48	1,514.04	17	145.38	5	131.49	.....	+ 82.46
$1,800 and under $2,100	9	4.6	3.71	606.71	303.55	146.67	133.21	94.76	390.49	1,675.39	8	279.63	1	50.00	.....	+243.01
$2,100 and under $2,500	1	4.0	2.72	615.40	341.35	60.00	124.25	97.60	563.10	1,801.70	1	599.50	.....	.....	.....	+599.50
$2,500 and over	1	7.0	5.00	888.16	502.35	96.00	100.50	44.75	879.54	2,511.30	1	249.00	.....	.....	.....	+249.00
Total	80	4.4	3.30	563.86	230.55	115.47	115.01	49.26	340.88	1,415.03	57	147.23	23	127.99	.....	+ 68.10

PER CENT.

Under $900	1.3	.....	.....	43.3	15.9	7.0	9.4	1.3	23.1	100.0	100.0	.....	.....	.....	.....	.....
$900 and under $1,200	10.0	.....	.....	42.9	13.2	9.3	9.9	3.1	21.6	100.0	37.5	.....	62.5	.....	.....	.....
$1,200 and under $1,500	47.5	.....	.....	41.7	16.0	7.9	8.6	2.9	22.9	100.0	68.4	.....	31.6	.....	.....	.....
$1,500 and under $1,800	27.5	.....	.....	38.3	16.4	8.6	7.4	3.5	25.7	100.0	77.3	.....	22.7	.....	.....	.....
$1,800 and under $2,100	11.3	.....	.....	36.2	18.1	8.8	8.0	5.7	23.3	100.0	88.9	.....	11.1	.....	.....	.....
$2,100 and under $2,500	1.3	.....	.....	34.2	18.9	3.3	6.9	5.4	31.3	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	1.3	.....	.....	35.4	20.0	3.8	4.0	1.8	36.0	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	39.8	16.3	8.2	8.1	3.5	24.1	100.0	71.3	.....	28.8	.....	.....	.....

[1] Not including 2 families in which rent is combined with fuel and light.
[2] Not including 1 family in which rent is combined with fuel and light.
[3] Not including 5 families in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

DALLAS, TEX.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having—	Average amount.	Families having—	Average amount.		
Under $900	2	4.5	2.83	$405.27	$104.88	$130.08	$29.83	$55.39	$107.20	$832.64	1	$17.00	1	$105.92	.....	−$44.46
$900 and under $1,200	23	4.7	2.80	496.44	139.16	148.46	50.27	60.17	196.07	1,090.58	9	61.85	11	50.53	3	+ .04
$1,200 and under $1,500	21	5.1	3.25	551.66	196.98	178.89	46.91	67.61	273.85	1,315.89	17	75.12	4	196.32	.....	+ 23.41
$1,500 and under $1,800	15	4.9	3.54	677.98	238.82	210.40	51.44	67.37	322.81	1,568.82	10	141.70	4	104.49	1	+ 66.61
$1,800 and under $2,100	12	5.9	4.11	735.60	359.77	211.89	56.54	135.61	415.93	1,915.33	7	152.40	3	264.25	2	+ 22.84
$2,100 and under $2,500	2	5.0	4.30	742.41	283.54	258.00	55.21	129.04	493.28	1,961.46	1	586.00	1	79.45	.....	+253.28
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	75	5.1	3.32	590.60	213.52	181.95	50.15	77.47	283.93	1,397.62	45	109.34	24	114.05	6	+ 29.11
	PER CENT.															
Under $900	2.7	.....	.....	48.7	12.6	15.6	3.6	6.7	12.9	100.0	50.0	.....	50.0	.....	.....	.....
$900 and under $1,200	30.7	.....	.....	45.5	12.8	13.6	4.6	5.5	18.0	100.0	39.1	.....	47.8	.....	13.0	.....
$1,200 and under $1,500	28.0	.....	.....	41.9	15.0	13.6	3.6	5.1	20.8	100.0	81.0	.....	19.0	.....	.....	.....
$1,500 and under $1,800	20.0	.....	.....	43.2	15.2	13.4	3.3	4.3	20.6	100.0	66.7	.....	26.7	.....	6.7	.....
$1,800 and under $2,100	16.0	.....	.....	38.4	18.8	11.1	3.0	7.1	21.7	100.0	58.3	.....	25.0	.....	16.7	.....
$2,100 and under $2,500	2.7	.....	.....	37.8	14.5	13.2	2.8	6.6	25.1	100.0	50.0	.....	50.0	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	42.3	15.3	13.0	3.6	5.5	20.3	100.0	60.0	.....	32.0	.....	8.0	.....

DENVER, COLO.

Under $900	4	4.0	3.04	$346.01	$118.55	$111.25	$59.90	$41.53	$216.13	$893.36	1	$23.67	2	$264.91	1	−$126.54
$900 and under $1,200	42	4.2	2.78	447.67	166.27	131.23	68.80	52.39	207.05	1,073.40	26	61.98	11	169.95	5	− 6.14
$1,200 and under $1,500	63	4.4	3.05	501.53	210.59	[1] 165.50	[1] 73.53	72.45	286.40	1,312.19	44	105.12	18	132.05	1	+ 35.69
$1,500 and under $1,800	29	4.8	3.23	549.39	236.36	[2] 176.74	[2] 83.00	89.19	379.70	1,517.38	26	122.01	3	50.83	.....	+ 104.13
$1,800 and under $2,100	8	5.3	3.67	577.34	249.58	193.50	77.53	76.60	456.21	1,630.75	8	262.33	.....	.....	.....	+ 262.33
$2,100 and under $2,500	3	6.0	4.97	864.52	446.90	184.00	80.24	136.93	302.55	2,015.15	3	344.76	.....	.....	.....	+ 344.76
$2,500 and over	5	4.8	4.09	740.15	459.87	193.20	110.06	134.54	584.45	2,222.28	5	494.65	.....	.....	.....	+ 494.65
Total	154	4.5	3.11	510.57	215.69	[3] 159.31	[3] 75.10	72.81	299.32	1,334.62	113	133.09	34	144.96	7	+ 65.65

PER CENT.

Under $900	2.6	.....	.....	38.7	13.3	12.5	6.7	4.6	24.2	100.0	25.0	.....	50.0	.....	25.0	.....
$900 and under $1,200	27.3	.....	.....	41.7	15.5	12.2	6.4	4.9	19.3	100.0	61.9	.....	26.2	.....	11.9	.....
$1,200 and under $1,500	40.9	.....	.....	38.2	16.0	[1] 12.7	[1] 5.6	5.5	21.8	100.0	69.8	.....	28.6	.....	1.6	.....
$1,500 and under $1,800	18.8	.....	.....	36.2	15.6	[2] 11.7	[2] 5.5	5.9	25.0	100.0	89.7	.....	10.3	.....	.....	.....
$1,800 and under $2,100	5.2	.....	.....	35.4	15.3	11.9	4.8	4.7	28.0	100.0	100.0	.....	.....	.....	.....	.....
$2,100 and under $2,500	1.9	.....	.....	42.9	22.2	9.1	4.0	6.8	15.0	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	3.2	.....	.....	33.3	20.7	8.7	5.0	6.1	26.3	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	38.3	16.2	[3] 12.0	[3] 5.7	5.5	22.4	100.0	73.4	.....	22.1	.....	4.5	.....

DES MOINES, IOWA.

Under $900	5	3.6	2.54	$374.41	$97.68	$153.80	$62.58	$10.84	$121.49	$820.80	2	$60.50	3	$56.37	.....	− $9.62
$900 and under $1,200	22	4.6	2.91	471.90	155.10	157.36	86.18	58.33	183.76	1,112.64	7	84.60	10	129.54	5	− 31.96
$1,200 and under $1,500	29	5.0	3.07	506.02	185.52	174.85	84.12	71.29	247.63	1,269.43	21	103.53	6	76.98	2	+ 59.04
$1,500 and under $1,800	21	5.0	3.44	572.14	275.91	188.32	86.34	101.26	353.19	1,577.16	15	134.18	6	109.16	.....	+ 64.66
$1,800 and under $2,100	18	4.7	3.09	551.72	261.90	[1] 232.78	[1] 111.16	134.96	442.46	1,735.71	17	186.82	1	48.55	.....	+173.74
$2,100 and under $2,500	4	7.0	4.47	828.57	389.83	167.00	111.81	161.43	462.60	2,121.23	3	227.52	1	450.00	.....	+ 58.14
$2,500 and over	3	8.0	6.00	754.49	593.84	258.33	115.02	84.69	602.71	2,409.08	2	451.52	1	183.00	.....	+240.01
Total	102	4.9	3.23	533.84	226.76	[1] 184.72	[1] 90.53	86.87	302.66	1,426.18	67	144.20	28	116.53	7	+ 62.73

PER CENT.

Under $900	4.9	.....	.....	45.6	11.9	18.7	7.6	1.3	14.8	100.0	40.0	.....	60.0	.....	.....	.....
$900 and under $1,200	21.6	.....	.....	42.4	13.9	14.1	7.7	5.2	16.5	100.0	31.8	.....	45.5	.....	22.7	.....
$1,200 and under $1,500	28.4	.....	.....	39.9	14.6	13.8	6.6	5.6	19.5	100.0	72.4	.....	20.7	.....	6.9	.....
$1,500 and under $1,800	20.6	.....	.....	36.3	17.5	11.9	5.5	6.4	22.4	100.0	71.4	.....	28.6	.....	.....	.....
$1,800 and under $2,100	17.6	.....	.....	31.8	15.1	[1] 13.4	[1] 6.4	7.8	25.5	100.0	94.4	.....	5.6	.....	.....	.....
$2,100 and under $2,500	3.9	.....	.....	39.1	18.4	7.9	5.3	7.6	21.8	100.0	75.0	.....	25.0	.....	.....	.....
$2,500 and over	2.9	.....	.....	31.3	24.7	10.7	4.8	3.5	25.0	100.0	66.7	.....	33.3	.....	.....	.....
Total	100.0	.....	.....	37.4	15.9	[1] 13.0	[1] 6.4	6.1	21.2	100.0	65.7	.....	27.4	.....	6.9	.....

[1] Not including 1 family in which rent is combined with fuel and light.
[2] Not including 2 families in which rent is combined with fuel and light.
[3] Not including 3 families in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

DULUTH, MINN.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount	Families having.	Average amount.		
Under $900	2	3.5	2.20	$338.75	$116.01	$81.50	$74.80	$76.57	$165.78	$853.40	1	$39.50	1	$29.55	.....	+ $4.98
$900 and under $1,200	11	5.1	3.39	467.70	209.90	172.45	85.11	41.89	156.27	1,133.32	5	45.46	5	54.03	1	− 3.90
$1,200 and under $1,500	38	4.9	2.98	481.59	202.18	194.63	95.55	66.12	244.81	1,284.87	28	126.25	10	97.97	.....	+ 67.24
$1,500 and under $1,800	31	5.2	3.46	515.12	264.76	230.39	95.59	112.03	296.52	1,514.40	23	164.91	8	56.64	.....	+107.74
$1,800 and under $2,100	14	4.9	3.17	563.15	328.77	236.81	103.15	116.15	345.98	1,694.01	13	277.73	1	77.54	.....	+252.36
$2,100 and under $2,500	2	7.0	3.37	664.64	262.56	270.00	135.12	184.95	445.78	1,963.04	2	321.22	.....	.....	.....	+321.22
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	98	5.0	3.20	503.11	240.40	208.71	95.86	87.71	268.17	1,403.95	72	164.55	25	72.40	1	+102.42
	PER CENT.															
Under $900	2.0	.....	.....	39.7	13.6	9.6	8.8	9.0	19.4	100.0	50.0	.....	50.0	.....	.....	.....
$900 and under $1,200	11.2	.....	.....	41.3	18.5	15.2	7.5	3.7	13.8	100.0	45.5	.....	45.5	.....	9.1	.....
$1,200 and under $1,500	38.8	.....	.....	37.5	15.7	15.1	7.4	5.1	19.1	100.0	73.7	.....	26.3	.....	.....	.....
$1,500 and under $1,800	31.6	.....	.....	34.0	17.5	15.2	6.3	7.4	19.6	100.0	74.2	.....	25.8	.....	.....	.....
$1,800 and under $2,100	14.3	.....	.....	33.2	19.4	14.0	6.1	6.9	20.4	100.0	92.9	.....	7.1	.....	.....	.....
$2,100 and under $2,500	2.0	.....	.....	33.9	13.4	13.8	6.9	9.4	22.7	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	35.8	17.1	14.9	6.8	6.2	19.1	100.0	73.5	.....	25.5	.....	1.0	.....

EL PASO, TEX.

Under $900	2	6.0	3.24	$618.98	$154.38	$248.75	$59.01	$3.20	$251.32	$1,335.64	.....	.....	2	$598.86	.....	−$598.86
$900 and under $1,200	4	4.3	2.96	536.19	166.01	230.75	58.18	36.76	228.70	1,256.59	2	$43.88	2	292.93	.....	− 124.52
$1,200 and under $1,500	8	4.6	2.91	458.54	163.66	221.91	69.23	27.77	307.53	1,248.64	7	120.15	1	100.00	.....	+ 92.63
$1,500 and under $1,800	33	5.1	3.35	583.14	196.05	262.53	85.98	86.39	364.86	1,578.95	25	145.38	8	136.15	.....	+ 77.13
$1,800 and under $2,100	21	4.9	3.39	643.39	266.58	276.82	90.43	93.29	472.37	1,842.87	16	151.92	5	189.70	.....	+ 70.58
$2,100 and under $2,500	7	6.6	4.37	718.52	380.93	254.61	98.97	112.31	564.42	2,129.77	5	239.75	2	172.68	.....	+ 121.91
$2,500 and over	4	5.0	4.03	747.02	494.83	[1] 356.67	[1] 92.64	155.83	972.53	2,815.45	1	900.00	3	329.65	.....	− 22.24
Total	79	5.1	3.42	605.36	240.45	[1] 263.14	[1] 84.76	83.48	426.31	1,704.59	56	162.37	23	228.50	.....	+ 48.57

PER CENT.

Under $900	2.5	.....	.....	46.3	11.6	18.6	4.4	0.2	18.8	100.0	.....	.....	100.0	.....	.....	.....
$900 and under $1,200	5.1	.....	.....	42.7	13.2	18.4	4.6	2.9	18.2	100.0	50.0	.....	50.0	.....	.....	.....
$1,200 and under $1,500	10.1	.....	.....	36.7	13.1	17.8	5.5	2.2	24.6	100.0	87.5	.....	12.5	.....	.....	.....
$1,500 and under $1,800	41.8	.....	.....	36.9	12.4	16.6	5.4	5.5	23.1	100.0	75.8	.....	24.2	.....	.....	.....
$1,800 and under $2,100	26.6	.....	.....	34.9	14.5	15.0	4.9	5.1	25.6	100.0	76.2	.....	23.8	.....	.....	.....
$2,100 and under $2,500	8.9	.....	.....	33.7	17.9	12.0	4.6	5.3	26.5	100.0	71.4	.....	28.6	.....	.....	.....
$2,500 and over	5.1	.....	.....	26.5	17.6	[1] 13.2	[1] 3.4	5.5	34.5	100.0	25.0	.....	75.0	.....	.....	.....
Total	100.0	.....	.....	35.5	14.1	[1] 15.6	[1] 5.0	4.9	25.0	100.0	70.9	.....	29.1	.....	.....	.....

EUREKA, CALIF.

Under $900	1	3.0	2.65	$333.65	$87.30	$90.00	$18.25	$6.35	$92.87	$634.42	1	$265.20	.....	.....	.....	+$265.20
$900 and under $1,200	13	4.2	2.94	445.76	157.48	115.69	48.42	42.81	275.35	1,085.51	8	88.37	5	$160.50	.....	− 7.35
$1,200 and under $1,500	28	4.3	3.06	475.13	241.96	161.47	58.36	58.02	356.14	1,351.09	18	107.32	9	226.70	1	− 3.87
$1,500 and under $1,800	17	4.4	2.99	504.43	238.59	167.29	61.34	73.15	402.17	1,446.99	14	281.80	3	106.83	.....	+ 213.22
$1,800 and under $2,100	15	5.3	3.77	560.82	322.20	187.38	68.49	81.63	478.77	1,699.30	13	278.57	2	275.00	.....	+ 204.76
$2,100 and under $2,500	1	4.0	3.64	617.25	500.50	181.20	58.25	52.40	603.25	2,012.85	1	162.70	.....	.....	.....	+ 162.70
$2,500 and over	1	7.0	5.40	700.59	593.09	192.00	67.10	70.20	1,118.91	2,741.89	.....	.....	1	231.76	.....	− 231.76
Total	76	4.5	3.20	496.55	248.58	159.86	58.91	62.87	386.65	1,413.41	55	193.33	20	197.25	1	+ 88.00

PER CENT.

Under $900	1.3	.....	.....	52.6	13.8	15.1	2.9	1.0	14.6	100.0	100.0	.....	.....	.....	.....	.....
$900 and under $1,200	17.1	.....	.....	41.1	14.5	10.7	4.5	3.9	25.4	100.0	61.5	.....	38.5	.....	.....	.....
$1,200 and under $1,500	36.8	.....	.....	35.2	17.9	12.0	4.3	4.3	26.4	100.0	64.3	.....	32.1	.....	3.6	.....
$1,500 and under $1,800	22.4	.....	.....	34.9	16.5	11.6	4.2	5.1	27.8	100.0	82.4	.....	17.6	.....	.....	.....
$1,800 and under $2,100	19.7	.....	.....	33.0	19.0	11.0	4.0	4.8	28.2	100.0	86.7	.....	13.3	.....	.....	.....
$2,100 and under $2,500	1.3	.....	.....	30.7	24.9	9.0	2.9	2.6	30.0	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	1.3	.....	.....	25.6	21.6	7.0	2.4	2.6	40.8	100.0	.....	.....	100.0	.....	.....	.....
Total	100.0	.....	.....	35.1	17.6	11.3	4.2	4.4	27.4	100.0	72.4	.....	26.3	.....	1.3	.....

[1] Not including 1 family in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

EVERETT, WASH.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900																
$900 and under $1,200	8	4.8	3.40	$442.85	$165.64	$129.56	$59.99	$48.06	$198.83	$1,044.93	5	$95.52	2	$139.50	1	+$24.83
$1,200 and under $1,500	29	4.4	3.24	493.48	218.93	163.52	58.30	70.27	247.73	1,252.23	23	116.48	5	141.94	1	+ 67.91
$1,500 and under $1,800	11	5.1	3.57	541.07	279.90	158.96	64.29	64.89	307.08	1,416.20	11	208.08				+208.08
$1,800 and under $2,100	3	4.0	3.16	460.53	248.53	263.53	71.32	63.57	570.55	1,678.03	2	391.10	1	27.00		+251.73
$2,100 and under $2,500																
$2,500 and over	1	6.0	4.82	772.80	587.40	192.00	93.30	58.20	489.55	2,193.25	1	371.50				+371.50
Total	52	4.6	3.36	499.23	232.42	163.65	61.25	65.10	276.04	1,297.69	42	157.13	8	126.96	2	+107.38
	PER CENT.															
Under $900																
$900 and under $1,200	15.4			42.4	15.9	12.4	5.7	4.6	19.0		62.5		25.0		12.5	
$1,200 and under $1,500	55.8			39.4	17.5	13.1	4.7	5.6	19.8		79.3		17.2		3.4	
$1,500 and under $1,800	21.2			38.2	19.8	11.2	4.5	4.6	21.7		100.0					
$1,800 and under $2,100	5.8			27.4	14.8	15.7	4.3	3.8	34.0		66.7		33.3			
$2,100 and under $2,500																
$2,500 and over	1.9			35.2	26.8	8.8	4.3	2.7	22.3		100.0					
Total	100.0			38.5	17.9	12.6	4.7	5.0	21.3		80.8		15.4		3.8	

FREDERICKSBURG, VA.

Under $900	11	4.3	2.97	$346.61	$117.22	$94.31	$70.88	$33.50	$110.04	$772.55	7	$50.89	4	$71.50		+ $6.38
$900 and under $1,200	12	5.3	3.15	401.26	154.62	129.88	88.34	54.82	212.98	1,041.89	5	48.03	6	75.76	1	− 17.87
$1,200 and under $1,500	21	5.5	3.66	497.59	216.30	148.86	105.26	77.64	270.95	1,316.59	15	112.23	6	96.92		+ 52.48
$1,500 and under $1,800	7	5.6	3.44	513.57	300.25	130.43	107.98	161.64	373.22	1,587.08	5	89.26	2	142.20		+ 23.13
$1,800 and under $2,100	3	6.7	4.96	647.31	403.40	[1] 246.00	[1] 110.20	37.30	391.92	1,787.14	3	217.16				+217.16
$2,100 and under $2,500	4	4.8	3.50	591.84	401.05	235.00	118.40	84.78	591.06	2,022.13	4	295.04				+295.04
$2,500 and over	2	4.5	3.11	597.77	416.55	182.00	209.50	49.53	447.77	1,903.11	2	894.69				+894.69
Total	60	5.2	3.44	469.62	223.94	[1] 142.90	[1] 100.32	72.31	275.07	1,283.58	41	154.81	18	89.25	1	+ 79.01

Total	60	5.2	3.44	469.62	223.94	[1] 142.90	[1] 100.32	72.31	275.07	1,283.58	41	154.81	18	89.25	1	+ 79.01

PER CENT.

Under $900	18.3	.....	.....	44.9	15.2	12.2	9.2	4.3	14.2	.....	63.6	.....	36.4	.....	.....	.....
$900 and under $1,200	20.0	.....	.....	36.5	14.8	12.5	8.5	5.3	20.4	.....	41.7	.....	50.0	.....	8.3	.....
$1,200 and under $1,500	35.0	.....	.....	37.8	16.4	11.3	8.0	5.9	20.6	.....	71.4	.....	28.6	.....	.....	.....
$1,500 and under $1,800	11.7	.....	.....	32.4	18.9	8.2	6.8	10.2	23.5	.....	71.4	.....	28.6	.....	.....	.....
$1,800 and under $2,100	5.0	.....	.....	36.2	22.6	[1] 14.5	[1] 6.5	2.1	21.9	.....	100.0	.....	.....	.....	.....	.....
$2,100 and under $2,500	6.7	.....	.....	29.3	19.8	11.6	5.9	4.2	29.2	.....	100.0	.....	.....	.....	.....	.....
$2,500 and over	3.3	.....	.....	31.4	21.9	9.6	11.0	2.6	23.5	.....	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	36.6	17.4	[1] 11.2	[1] 7.9	5.6	21.4	.....	68.3	.....	30.0	.....	1.7	.....

GRAND ISLAND, NEBR.

Under $900	4	4.5	2.96	$405.27	$99.72	$111.00	$86.09	$11.61	$118.69	$832.38	2	$49.50	2	$73.85	.....	−$12.18
$900 and under $1,200	15	3.7	2.80	420.76	138.89	172.14	90.69	45.12	194.63	1,062.22	10	78.06	5	171.54	.....	− 5.14
$1,200 and under $1,500	26	4.5	2.74	494.87	213.00	169.31	99.01	86.86	232.68	1,295.73	18	129.34	6	128.92	2	+ 59.79
$1,500 and under $1,800	11	4.7	3.07	497.22	286.18	179.82	90.93	109.11	349.63	1,512.89	10	147.50	1	340.00	.....	+103.18
$1,800 and under $2,100	13	4.6	3.20	556.13	286.74	219.27	110.01	102.04	322.27	1,596.47	12	394.81	1	125.00	.....	+354.83
$2,100 and under $2,500	4	4.8	3.64	632.39	453.97	236.13	149.80	124.40	368.92	1,965.60	4	393.30	.....	.....	.....	+393.30
$2,500 and over	4	6.5	4.99	862.62	538.69	196.25	136.07	205.22	598.26	2,537.11	3	236.54	1	424.60	.....	+ 71.26
Total	77	4.5	3.05	512.70	245.02	181.64	101.99	88.66	277.25	1,407.25	59	198.36	16	166.78	2	+117.34

PER CENT.

Under $900	5.2	.....	.....	48.7	12.0	13.3	10.3	1.4	14.3	100.0	50.0	.....	50.0	.....	.....	.....
$900 and under $1,200	19.5	.....	.....	39.6	13.1	16.2	8.5	4.2	18.3	100.0	66.7	.....	33.3	.....	.....	.....
$1,200 and under $1,500	33.8	.....	.....	38.2	16.4	13.1	7.6	6.7	18.0	100.0	69.2	.....	23.1	.....	7.7	.....
$1,500 and under $1,800	14.3	.....	.....	32.9	18.9	11.9	6.0	7.2	23.1	100.0	90.9	.....	9.1	.....	.....	.....
$1,800 and under $2,100	16.9	.....	.....	34.8	18.0	13.7	6.9	6.4	20.2	100.0	92.3	.....	7.7	.....	.....	.....
$2,100 and under $2,500	5.2	.....	.....	32.2	23.1	12.0	7.6	6.3	18.8	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	5.2	.....	.....	34.0	21.2	7.7	5.4	8.1	23.6	100.0	75.0	.....	25.0	.....	.....	.....
Total	100.0	.....	.....	36.4	17.4	12.9	7.2	6.3	19.7	100.0	76.6	.....	20.8	.....	2.6	.....

[1] Not including 1 family in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

HOUSTON, TEX.: White families.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	1	3.0	2.90	$384.60	$62.82	$120.00	$50.94	$11.09	$248.08	$877.53	.....	.....	1	$22.53	.....	−$22.53
$900 and under $1,200	15	4.3	3.12	454.33	143.02	155.91	53.15	47.24	190.24	1,043.90	12	$62.88	3	110.85	.....	+ 28.13
$1,200 and under $1,500	35	4.7	3.36	538.54	182.36	[1] 167.17	[1] 59.12	63.60	303.02	1,313.20	25	116.88	9	126.98	1	+ 50.83
$1,500 and under $1,800	25	4.8	3.17	555.39	236.61	206.07	61.60	82.87	359.15	1,501.69	23	150.41	1	121.85	1	+133.51
$1,800 and under $2,100	15	5.3	3.54	643.07	328.39	232.87	66.09	112.22	439.20	182.85	12	188.64	2	388.24	1	+ 99.15
$2,100 and under $2,500	5	6.2	4.04	764.22	321.30	224.40	81.81	181.49	530.90	2,104.10	4	233.24	1	41.00	.....	+178.39
$2,500 and over	2	5.5	2.97	629.65	267.83	311.25	64.54	160.33	703.75	2,137.34	2	439.67	.....	.....	.....	+439.67
Total	98	4.9	3.33	557.75	220.14	[1] 191.30	[1] 61.13	80.91	340.16	1,450.64	78	143.74	17	143.37	3	+ 89.54
	PER CENT.															
Under $900	1.0	.....	.....	43.8	7.2	13.7	5.8	1.3	28.3	100.0	.....	.....	100.0	.....	.....	.....
$900 and under $1,200	15.3	.....	.....	43.5	13.7	14.9	5.1	4.5	18.2	100.0	80.0	.....	20.0	.....	.....	.....
$1,200 and under $1,500	35.7	.....	.....	41.0	13.9	[1] 12.8	[1] 4.5	4.8	23.1	100.0	71.4	.....	25.7	.....	2.9	.....
$1,500 and under $1,800	25.5	.....	.....	37.0	15.8	13.7	4.1	5.5	23.9	100.0	92.0	.....	4.0	.....	4.0	.....
$1,800 and under $2,100	15.3	.....	.....	35.3	18.0	12.8	3.6	6.2	24.1	100.0	80.0	.....	13.3	.....	6.7	.....
$2,100 and under $2,500	5.1	.....	.....	36.3	15.3	10.7	3.9	8.6	25.2	100.0	80.0	.....	20.0	.....	.....	.....
$2,500 and over	2.0	.....	.....	29.5	12.5	14.6	3.0	7.5	32.9	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	38.4	15.2	[1] 13.2	[1] 4.2	5.6	23.4	100.0	79.6	.....	17.3	.....	3.1	.....

HOUSTON, TEX.: Colored families.

Under $900	7	3.6	2.74	$383.10	$131.27	[2] $129.83	[2] $39.40	$31.99	$146.22	$858.53	4	$23.74	1	$17.20	2	+$11.11
$900 and under $1,200	29	4.7	3.48	479.80	157.53	131.83	51.43	49.48	177.32	1,047.38	14	45.42	9	75.17	6	− 1.40
$1,200 and under $1,500	10	5.0	3.41	497.25	205.08	148.90	46.10	81.44	311.37	1,290.14	7	64.86	2	94.77	1	+ 26.45
$1,500 and under $1,800	3	6.3	5.13	699.12	298.67	158.00	49.66	132.16	295.85	1,633.46	2	59.60	.....	.....	1	+ 39.73
$1,800 and under $2,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	49	4.7	3.46	482.97	172.12	[2] 136.77	[2] 48.71	58.56	207.49	1,105.83	27	48.30	12	73.60	10	+ 8.59

PER CENT.

Under $900	14.3	.....	.....	44.6	15.3	[1] 15.0	[2] 4.6	3.7	17.0	100.0	57.1	.....	14.3	.....	28.6	.....
$900 and under $1,200	59.2	.....	.....	45.8	15.0	12.6	4.9	4.7	16.9	100.0	48.3	.....	31.0	.....	20.7	.....
$1,200 and under $1,500	20.4	.....	.....	38.5	15.9	11.5	3.6	6.3	24.1	100.0	70.0	.....	20.0	.....	10.0	.....
$1,500 and under $1,800	6.1	.....	.....	42.8	18.3	9.7	3.0	8.1	18.1	100.0	66.7	.....	.....	.....	33.3	.....
$1,800 and under $2,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	43.7	15.6	[1] 12.3	[2] 4.4	5.3	18.8	100.0	55.1	.....	24.5	.....	20.4	.....

HUNTSVILLE, ALA.

Under $900	11	4.3	2.84	$384.90	$122.97	$62.07	$66.35	$24.76	$112.48	$773.54	5	$41.90	4	$44.50	2	+$2.86
$900 and under $1,200	28	4.6	2.92	495.68	149.43	70.45	62.89	45.85	206.41	1,030.71	12	106.75	7	80.41	9	+25.65
$1,200 and under $1,500	29	5.0	3.43	545.10	219.47	91.68	68.28	49.22	268.81	1,242.56	18	158.15	5	66.68	6	+86.67
$1,500 and under $1,800	7	5.3	3.77	630.22	230.79	113.40	76.71	85.85	417.68	1,554.65	3	137.58	2	159.40	2	+13.42
$1,800 and under $2,100	5	7.6	6.10	756.30	410.82	82.65	82.20	106.89	451.36	1,890.21	2	43.36	2	25.00	1	+ 7.34
$2,100 and under $2,500	1	6.0	3.66	872.90	616.05	52.00	93.00	131.55	354.45	2,119.95	.....	.....	.....	.....	1	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	81	5.0	3.37	530.70	199.84	81.15	68.05	52.48	251.20	1,183.41	40	120.92	20	72.15	21	+41.90

PER CENT.

Under $900	13.6	.....	.....	49.8	15.9	8.0	8.6	3.2	14.5	100.0	45.5	.....	36.4	.....	18.2	.....
$900 and under $1,200	34.6	.....	.....	48.1	14.5	6.8	6.1	4.4	20.0	100.0	42.9	.....	25.0	.....	32.1	.....
$1,200 and under $1,500	35.8	.....	.....	43.9	17.7	7.4	5.5	4.0	21.6	100.0	62.1	.....	17.2	.....	20.7	.....
$1,500 and under $1,800	8.6	.....	.....	40.5	14.8	7.3	4.9	5.5	26.9	100.0	42.9	.....	28.6	.....	28.6	.....
$1,800 and under $2,100	6.2	.....	.....	40.0	21.7	4.4	4.3	5.7	23.9	100.0	40.0	.....	40.0	.....	20.0	.....
$2,100 and under $2,500	1.2	.....	.....	41.2	29.1	2.5	4.4	6.2	16.7	100.0	.....	.....	.....	.....	100.0	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	44.8	16.9	6.9	5.8	4.4	21.2	100.0	49.4	.....	24.7	.....	25.9	.....

[1] Not including 2 families in which rent is combined with fuel and light.

[2] Not including 1 family in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

JACKSONVILLE, FLA.: White families.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	1	3.0	2.05	$369.54	$156.57	$120.00	$48.30	$7.19	$148.40	$850.00	.....	.....	.....	.....	1	.....
$900 and under $1,200	3	5.7	3.15	437.88	203.02	144.00	67.53	34.18	316.89	1,203.50	1	$36.00	2	$210.00	.....	−$128.00
$1,200 and under $1,500	18	4.3	2.61	473.99	230.78	165.08	72.70	74.28	290.28	1,307.12	11	86.26	2	130.91	5	+ 38.17
$1,500 and under $1,800	28	5.0	3.23	550.14	232.40	186.95	67.46	77.25	424.98	1,539.17	23	155.72	4	271.83	1	+ 89.08
$1,800 and under $2,100	24	5.1	3.30	561.45	269.02	208.29	70.50	113.19	489.47	1,711.92	21	266.21	3	253.67	.....	+ 201.22
$2,100 and under $2,500	6	5.7	3.66	657.15	455.08	[1] 234.40	[1] 83.84	71.95	430.24	1,957.87	6	295.03	.....	.....	.....	+ 295.03
$2,500 and over	1	5.0	3.00	619.86	519.00	252.00	83.80	30.25	577.09	2,082.00	1	426.00	.....	.....	.....	+ 426.00
Total	81	4.9	3.12	538.97	260.90	[1] 189.76	[1] 70.54	83.80	409.00	1,555.56	63	196.08	11	230.01	7	+ 121.27
	PER CENT.															
Under $900	1.2	.....	.....	43.5	18.4	14.1	5.7	0.8	17.5	100.0	.....	.....	.....	.....	100.0	.....
$900 and under $1,200	3.7	.....	.....	36.4	16.9	12.0	5.6	2.8	26.3	100.0	33.3	.....	66.7	.....	.....	.....
$1,200 and under $1,500	22.2	.....	.....	36.3	17.7	12.6	5.6	5.7	22.2	100.0	61.1	.....	11.1	.....	27.8	.....
$1,500 and under $1,800	34.6	.....	.....	35.7	15.1	12.1	4.4	5.0	27.6	100.0	82.1	.....	14.3	.....	3.6	.....
$1,800 and under $2,100	29.6	.....	.....	32.8	15.7	12.2	4.1	6.6	28.6	100.0	87.5	.....	12.5	.....	.....	.....
$2,100 and under $2,500	7.4	.....	.....	33.6	23.2	[1] 12.5	[1] 4.5	3.7	22.0	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	1.2	.....	.....	30.0	24.9	12.1	4.0	1.5	27.7	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	34.6	16.8	[1] 12.3	[1] 4.6	5.4	26.3	100.0	77.8	.....	13.6	.....	8.6	.....

JACKSONVILLE, FLA.: Colored families.

Under $900	11	4.2	3.02	$349.39	$104.75	$99.36	$47.78	$18.37	$180.05	$799.70	4	$54.38	2	$82.50	5	+ $4.78
$900 and under $1,200	19	4.5	3.09	415.72	203.47	122.32	49.62	40.72	199.97	1,031.81	12	42.79	3	28.57	4	+ 22.51
$1,200 and under $1,500	10	5.5	3.55	449.86	242.77	197.95	53.91	68.86	236.48	1,249.82	5	63.60	2	41.75	3	+ 23.45
$1,500 and under $1,800	3	4.0	3.18	458.87	351.94	203.67	59.84	57.14	208.40	1,429.85	3	191.66	.....	.....	.....	+191.66
$1,800 and under $2,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	43	4.6	3.19	415.98	197.72	139.71	50.86	42.69	203.95	1,050.91	24	67.66	7	47.74	12	+ 29.99

Total	43	4.6	3.19	415.98	197.72	139.71	50.86	42.69	203.95	1,050.91	24	67.00	7	17.71	12	+23.00

PER CENT.

Under $900	25.6			43.7	13.1	12.4	6.0	2.3	22.5	100.0	36.4		18.2		45.5	
$900 and under $1,200	44.2			40.3	19.7	11.9	4.8	3.9	19.4	100.0	63.2		15.8		21.1	
$1,200 and under $1,500	23.3			36.0	19.4	15.8	4.3	5.5	18.9	100.0	50.0		20.0		30.0	
$1,500 and under $1,800	7.0			38.4	24.6	14.2	4.2	4.0	14.6	100.0	100.0					
$1,800 and under $2,100																
$2,100 and under $2,500																
$2,500 and over																
Total	100.0			39.6	18.8	13.3	4.8	4.1	19.4	100.0	55.8		16.3		27.9	

KANSAS CITY, KANS., and KANSAS CITY, MO.

Under $900	3	3.0	2.58	$375.65	$99.57	$117.67	$62.10	$38.98	$130.68	$824.64	2	$28.06	1	$28.00		+ $9.37
$900 and under $1,200	46	4.5	3.03	472.13	141.80	[1] 150.47	[1] 66.56	54.90	220.71	1,106.37	22	46.08	16	123.50	8	− 20.92
$1,200 and under $1,500	91	4.2	2.91	514.08	197.12	[1] 178.10	[1] 74.60	60.95	273.37	1,298.44	59	112.03	27	100.59	5	+ 42.79
$1,500 and under $1,800	55	4.7	3.26	574.59	231.31	[1] 224.33	[1] 91.15	89.23	337.93	1,549.36	40	138.85	13	130.96	2	+ 70.03
$1,800 and under $2,100	21	4.7	3.50	615.42	314.16	219.25	92.18	76.62	394.13	1,711.76	19	230.13			2	+208.21
$2,100 and under $2,500	4	5.8	4.23	704.62	372.62	240.38	105.15	73.30	556.22	2,052.28	3	270.67			1	+203.00
$2,500 and over	4	5.8	4.42	800.05	456.94	234.00	106.56	64.33	839.31	2,501.19	3	190.30	1	17.50		+138.35
Total	224	4.5	3.12	536.48	211.59	[2] 189.00	[2] 79.64	68.11	302.98	1,387.95	148	128.30	58	111.03	18	+ 56.02

PER CENT.

Under $900	1.3			45.6	12.1	14.3	7.5	4.7	15.8	100.0	66.7		33.3			
$900 and under $1,200	20.5			42.7	12.8	[1] 13.6	[1] 6.0	5.0	19.9	100.0	47.8		34.8		17.4	
$1,200 and under $1,500	40.6			39.6	15.2	[1] 13.7	[1] 5.7	4.7	21.1	100.0	64.8		29.7		5.5	
$1,500 and under $1,800	24.6			37.1	14.9	[1] 14.5	[1] 5.9	5.8	21.8	100.0	72.7		23.6		3.6	
$1,800 and under $2,100	9.4			36.0	18.4	12.8	5.4	4.5	23.0	100.0	90.5				9.5	
$2,100 and under $2,500	1.8			34.3	18.2	11.7	5.1	3.6	27.1	100.0	75.0				25.0	
$2,500 and over	1.8			32.0	18.3	9.4	4.3	2.6	33.6	100.0	75.0		25.0			
Total	100.0			38.7	15.2	[2] 13.6	[2] 5.7	4.9	21.8	100.0	66.1		25.9		8.0	

[1] Not including 1 family in which rent is combined with fuel and light.

[2] Not including 3 families in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

KNOXVILLE, TENN.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	14	5.1	3.09	$430.50	$118.43	$86.01	$53.34	$38.31	$196.57	$923.16	2	$17.50	11	$158.64	1	−$122.14
$900 and under $1,200	21	5.6	3.42	511.14	167.88	99.11	62.64	56.28	210.42	1,107.47	3	67.71	18	79.06	.....	− 58.09
$1,200 and under $1,500	17	4.5	3.28	491.32	222.58	186.86	75.70	78.66	261.67	1,316.80	12	119.12	5	228.26	.....	+ 16.95
$1,500 and under $1,800	7	6.4	4.80	639.15	368.86	159.36	78.19	123.54	377.86	1,746.96	3	192.89	3	480.71	1	− 123.35
$1,800 and under $2,100	11	5.8	3.86	651.07	344.55	169.74	76.99	207.64	432.78	1,882.77	8	116.38	2	77.58	1	+ 70.53
$2,100 and under $2,500	5	4.8	3.21	656.58	307.87	[1] 205.50	[1] 86.73	120.24	567.66	2,002.87	4	428.26	1	550.00	.....	+ 232.61
$2,500 and over	2	7.0	4.66	670.45	521.00	144.94	84.11	185.45	557.05	2,163.00	2	397.85	.....	.....	.....	+ 397.85
Total	77	5.4	3.54	537.31	232.74	[1] 138.90	[1] 69.19	93.20	298.41	1,374.63	34	167.24	40	161.41	3	− 10.01
	PER CENT.															
Under $900	18.2	.....	.....	46.6	12.8	9.3	5.8	4.2	21.3	100.0	14.3	.....	78.6	.....	7.1	.....
$900 and under $1,200	27.3	.....	.....	46.2	15.2	8.9	5.7	5.1	19.0	100.0	14.3	.....	85.7	.....	.....	.....
$1,200 and under $1,500	22.1	.....	.....	37.3	16.9	14.2	5.7	6.0	19.9	100.0	70.6	.....	29.4	.....	.....	.....
$1,500 and under $1,800	9.1	.....	.....	36.6	21.1	9.1	4.5	7.1	21.6	100.0	42.9	.....	42.9	.....	14.3	.....
$1,800 and under $2,100	14.3	.....	.....	34.6	18.3	9.0	4.1	11.0	23.0	100.0	72.7	.....	18.2	.....	9.1	.....
$2,100 and under $2,500	6.5	.....	.....	32.8	15.4	[1] 11.2	[1] 4.7	6.0	28.3	100.0	80.0	.....	20.0	.....	.....	.....
$2,500 and over	2.6	.....	.....	31.0	24.1	6.7	3.9	8.6	25.8	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	39.1	16.9	[1] 10.2	[1] 5.1	6.8	21.7	100.0	44.2	.....	51.9	.....	3.9	.....

LITTLE ROCK, ARK.

Under $900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$900 and under $1,200	5	4.2	3.04	$463.97	$158.50	$141.80	$46.09	$38.51	$197.92	$1,046.79	3	$88.68	2	47.29	.....	+$34.29
$1,200 and under $1,500	16	4.6	3.04	522.60	211.58	208.46	63.79	48.50	288.90	1,343.83	9	105.36	6	124.83	1	+ 12.46
$1,500 and under $1,800	13	5.2	3.31	601.55	244.54	235.68	70.72	105.66	363.87	1,622.02	10	114.96	3	383.47	.....	− .07
$1,800 and under $2,100	21	4.9	3.32	632.76	324.12	278.47	79.03	89.28	426.50	1,830.16	17	178.91	4	228.69	.....	+101.27
$2,100 and under $2,500	13	5.7	3.29	650.61	316.09	341.20	92.92	106.46	631.73	2,139.02	7	268.34	5	138.65	1	+ 91.17
$2,500 and over	3	6.7	4.45	731.85	324.04	317.67	92.77	58.73	586.17	2,111.22	3	597.15	.....	.....	.....	+597.15
Total	71	5.1	3.28	597.79	271.05	258.38	74.88	81.37	412.25	1,695.71	49	185.21	20	180.10	2	+ 77.09

Total	71	5.1	3.28	597.79	271.05	258.38	74.88	81.37	412.25	1,695.71	49	185.21	20	180.10	2	+ 77.09

PER CENT.

Under $900																
$900 and under $1,200	7.0			44.3	15.1	13.5	4.4	3.7	18.9	100.0	60.0		40.0			
$1,200 and under $1,500	22.5			38.9	15.7	15.5	4.7	3.6	21.5	100.0	56.2		37.5		6.2	
$1,500 and under $1,800	18.3			37.1	15.1	14.5	4.4	6.5	22.4	100.0	76.9		23.1			
$1,800 and under $2,100	29.6			34.6	17.7	15.2	4.3	4.9	23.3	100.0	81.0		19.0			
$2,100 and under $2,500	18.3			30.4	14.8	16.0	4.3	5.0	29.5	100.0	53.8		38.5		7.7	
$2,500 and over	4.2			34.7	15.3	15.0	4.4	2.8	27.8	100.0	100.0					
Total	100.0			35.3	16.0	15.2	4.4	4.8	24.3	100.0	69.0		28.2		2.8	

LOS ANGELES, CALIF.

Under $900	6	4.0	2.60	$319.65	$114.79	$131.55	$34.02	$37.45	$152.84	$790.30	4	$52.00	2	$19.66		+$28.11
$900 and under $1,200	53	4.0	2.83	405.90	149.31	158.68	36.84	50.10	240.32	1,041.14	38	73.18	11	126.97	4	+ 26.12
$1,200 and under $1,500	75	4.7	3.20	463.38	181.17	181.34	41.37	57.17	345.13	1,269.57	58	140.06	15	150.47	2	+ 78.22
$1,500 and under $1,800	40	4.2	3.16	478.61	216.98	184.72	42.63	98.98	459.49	1,481.11	31	198.63	9	149.89		+120.21
$1,800 and under $2,100	20	5.6	4.33	654.16	285.33	194.41	47.63	79.35	524.94	1,785.81	17	219.53	3	204.36		+155.94
$2,100 and under $2,500	7	4.6	3.92	647.41	351.72	219.00	53.02	98.96	623.13	1,993.24	7	267.74				+267.74
$2,500 and over	1	5.0	2.58	577.18	618.70	180.00	38.75	254.48	1,083.14	2,752.25	1	353.80				+353.80
Total	202	4.5	3.21	472.88	196.32	177.18	41.16	67.63	365.65	1,320.82	156	148.91	40	141.38	6	+ 87.00

PER CENT.

Under $900	3.0			40.4	14.5	16.6	4.3	4.7	19.3	100.0	66.7		33.3			
$900 and under $1,200	26.2			39.0	14.3	15.2	3.5	4.8	23.1	100.0	71.7		20.8		7.5	
$1,200 and under $1,500	37.1			36.5	14.3	14.3	3.3	4.5	27.2	100.0	77.3		20.0		2.7	
$1,500 and under $1,800	19.8			32.3	14.7	12.5	2.9	6.7	31.0	100.0	77.5		22.5			
$1,800 and under $2,100	9.9			36.6	16.0	10.9	2.7	4.4	29.4	100.0	85.0		15.0			
$2,100 and under $2,500	3.5			32.5	17.6	11.0	2.7	5.0	31.3	100.0	100.0					
$2,500 and over	.5			21.0	22.5	6.5	1.4	9.2	39.4	100.0	100.0					
Total	100.0			35.8	14.9	13.4	3.1	5.1	27.7	100.0	77.2		19.8		3.0	

[1] Not including 1 family in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

MEMPHIS, TENN.: White families.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	1	5.0	2.94	$324.37	$59.06	$150.00	$83.80	$21.21	$151.06	$789.50	1	$58.68	.....	.....	.....	+$58.68
$900 and under $1,200	12	4.5	3.21	417.95	130.50	182.26	57.01	30.55	235.31	1,053.57	8	99.03	4	$74.84	.....	+ 41.07
$1,200 and under $1,500	35	4.6	3.22	486.67	209.71	172.79	74.13	64.43	293.44	1,301.16	24	93.05	9	112.13	2	+ 34.97
$1,500 and under $1,800	28	4.8	3.36	573.82	267.25	227.61	83.46	67.89	384.41	1,604.44	19	125.22	9	109.99	.....	+ 49.62
$1,800 and under $2,100	16	5.1	3.74	653.61	289.49	237.06	84.97	85.81	469.34	1,820.28	12	168.33	3	59.96	1	+115.00
$2,100 and under $2,500	6	4.3	3.42	631.45	359.20	236.00	82.65	91.04	523.61	1,923.95	6	291.18	.....	.....	.....	+291.18
$2,500 and over	5	6.2	4.88	864.05	503.09	250.20	108.80	127.42	746.50	2,600.06	3	289.33	1	211.80	1	+131.24
Total	103	4.8	3.43	553.46	250.00	206.00	78.63	68.93	372.74	1,529.76	73	138.33	26	103.47	4	+ 71.92
	PER CENT.															
Under $900	1.0	.....	.....	41.1	7.5	19.0	10.6	2.7	19.1	100.0	100.0	.....	.....	.....	.....	.....
$900 and under $1,200	11.7	.....	.....	39.7	12.4	17.3	5.4	2.9	22.3	100.0	66.7	.....	33.3	.....	.....	.....
$1,200 and under $1,500	34.0	.....	.....	37.4	16.1	13.3	5.7	5.0	22.6	100.0	68.6	.....	25.7	.....	5.7	.....
$1,500 and under $1,800	27.2	.....	.....	35.8	16.7	14.2	5.2	4.2	24.0	100.0	67.9	.....	32.1	.....	.....	.....
$1,800 and under $2,100	15.5	.....	.....	35.9	15.9	13.0	4.7	4.7	25.8	100.0	75.0	.....	18.8	.....	6.3	.....
$2,100 and under $2,500	5.8	.....	.....	32.8	18.7	12.3	4.3	4.7	27.2	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	4.9	.....	.....	33.2	19.3	9.6	4.2	4.9	28.7	100.0	60.0	.....	20.0	.....	20.0	.....
Total	100.0	.....	.....	36.2	16.3	13.5	5.1	4.5	24.4	100.0	70.9	.....	25.2	.....	3.9	.....

MEMPHIS, TENN.: Colored families.

Under $900	18	4.6	3.19	$365.34	$127.33	$98.96	$50.26	$28.77	$142.43	$813.10	2	$9.23	7	$42.00	9	−$15.31
$900 and under $1,200	20	5.2	3.43	463.09	168.66	102.11	52.02	41.37	196.84	1,024.08	8	29.34	8	29.76	4	− .17
$1,200 and under $1,500	9	5.3	4.09	536.97	232.24	107.03	55.33	48.61	299.49	1,279.67	7	113.89	.....	.....	2	+ 88.58
$1,500 and under $1,800	1	4.0	3.90	654.26	265.10	84.00	49.65	105.40	483.15	1,641.56	1	8.44	.....	.....	.....	+ 8.44
$1,800 and under $2,100	1	7.0	4.81	768.59	236.94	120.00	79.90	21.04	667.30	1,893.77	.....	.....	1	66.57	.....	− 66.57
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	49	5.0	3.50	450.89	168.52	101.85	52.50	38.97	211.15	1,023.88	18	58.83	16	37.41	15	+ 9.39

$2,500 and over																
Total	49	5.0	3.50	450.89	168.52	101.85	52.50	38.97	211.15	1,023.88	18	58.83	16	37.41	15	+ 9.39

PER CENT.

Under $900	36.7	.....	.....	44.9	15.7	12.2	6.2	3.5	17.5	100.0	11.1	.....	38.9	.....	50.0	.....
$900 and under $1,200	40.8	.....	.....	45.2	16.5	10.0	5.1	4.0	19.2	100.0	40.0	.....	40.0	.....	20.0	.....
$1,200 and under $1,500	18.4	.....	.....	42.0	18.1	8.4	4.3	3.8	23.4	100.0	77.8	.....	.....	.....	22.2	.....
$1,500 and under $1,800	2.0	.....	.....	39.9	16.1	5.1	3.0	6.4	29.4	100.0	100.0	.....	.....	.....	.....	.....
$1,800 and under $2,100	2.0	.....	.....	40.6	12.5	6.3	4.2	1.1	35.2	100.0	.....	.....	100.0	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	44.0	16.5	9.9	5.1	3.8	20.6	100.0	36.7	.....	32.7	.....	30.6	.....

MERIDIAN, MISS.

Under $900	6	4.2	3.10	$335.84	$104.51	$99.53	$49.36	$9.25	$167.62	$766.11	3	$65.00	2	$14.00	1	+$27.83
$900 and under $1,200	14	4.4	3.10	455.53	150.11	113.43	63.79	29.03	258.59	1,070.49	8	67.17	4	61.07	2	+ 20.94
$1,200 and under $1,500	23	5.2	3.32	530.95	224.31	151.46	71.31	55.42	278.91	1,312.36	10	150.52	12	64.10	1	+ 32.00
$1,500 and under $1,800	20	5.2	3.83	590.10	296.15	165.32	79.03	70.25	382.93	1,583.78	8	215.95	9	129.67	3	+ 28.03
$1,800 and under $2,100	10	5.0	3.16	629.55	288.36	185.79	80.92	99.61	497.93	1,782.17	7	248.30	3	212.86	.....	+109.95
$2,100 and under $2,500	2	6.0	4.54	634.93	542.50	193.80	72.95	384.69	379.23	2,208.10	.....	.....	1	27.90	1	− 13.95
$2,500 and over	3	4.3	3.32	599.24	456.37	170.87	73.97	128.48	981.92	2,410.85	2	460.00	1	80.00	.....	+280.00
Total	78	4.9	3.40	535.51	245.49	150.43	71.63	67.85	351.07	1,421.97	38	174.30	32	92.35	8	+ 47.03

PER CENT.

Under $900	7.7	.....	.....	43.8	13.6	13.0	6.4	1.2	21.9	100.0	50.0	.....	33.3	.....	16.7	.....
$900 and under $1,200	17.9	.....	.....	42.6	14.0	10.6	6.0	2.7	24.2	100.0	57.1	.....	28.6	.....	14.3	.....
$1,200 and under $1,500	29.5	.....	.....	40.5	17.1	11.5	5.4	4.2	21.3	100.0	43.5	.....	52.2	.....	4.3	.....
$1,500 and under $1,800	25.6	.....	.....	37.3	18.7	10.4	5.0	4.4	24.2	100.0	40.0	.....	45.0	.....	15.0	.....
$1,800 and under $2,100	12.8	.....	.....	35.3	16.2	10.4	4.5	5.6	27.9	100.0	70.0	.....	30.0	.....	.....	.....
$2,100 and under $2,500	2.6	.....	.....	28.8	24.6	8.8	3.3	17.4	17.2	100.0	.....	.....	50.0	.....	50.0	.....
$2,500 and over	3.8	.....	.....	24.9	18.9	7.1	3.1	5.3	40.7	100.0	66.7	.....	33.3	.....	.....	.....
Total	100.0	.....	.....	37.7	17.3	10.6	5.0	4.8	24.7	100.0	48.7	.....	41.0	.....	10.8	.....

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OR ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

MOBILE, ALA.: White families.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	2	4.0	2.59	$357.50	$145.34	$108.00	$63.16	$43.10	$131.92	$849.62	1	$10.00	.....	.....	1	+ $5.00
$900 and under $1,200	16	4.4	3.08	472.70	160.20	110.72	65.17	38.98	226.51	1,074.28	7	78.46	4	$100.99	5	+ 9.08
$1,200 and under $1,500	41	4.5	3.08	512.60	238.08	139.23	71.41	58.24	295.25	1,314.81	28	126.19	10	151.86	3	+ 49.14
$1,500 and under $1,800	24	4.9	3.20	618.72	280.71	160.87	74.26	71.86	335.03	1,541.44	18	208.67	5	139.42	1	+127.45
$1,800 and under $2,100	19	5.4	3.78	635.51	339.59	184.14	77.51	84.96	409.11	1,730.83	16	254.75	2	150.50	1	+198.68
$2,100 and under $2,500	3	6.0	4.33	803.27	424.38	152.68	97.99	83.50	491.84	2,053.67	3	165.00	.....	.....	.....	+165.00
$2,500 and over	3	6.7	4.93	819.32	648.26	200.00	110.77	31.03	643.38	2,452.75	3	209.06	.....	.....	.....	+209.06
Total	108	4.8	3.31	565.62	268.73	149.20	73.87	62.78	326.05	1,446.24	76	171.67	21	139.08	11	+ 93.76
	PER CENT.															
Under $900	1.9	.....	.....	42.1	17.1	12.7	7.4	5.1	15.5	100.0	50.0	.....	.....	.....	50.0	.....
$900 and under $1,200	14.8	.....	.....	44.0	14.9	10.3	6.1	3.6	21.1	100.0	43.8	.....	25.0	.....	31.3	.....
$1,200 and under $1,500	38.0	.....	.....	39.0	18.1	10.6	5.4	4.4	22.5	100.0	68.3	.....	24.4	.....	7.3	.....
$1,500 and under $1,800	22.2	.....	.....	40.1	18.2	10.4	4.8	4.7	21.7	100.0	75.0	.....	20.8	.....	4.2	.....
$1,800 and under $2,100	17.6	.....	.....	36.7	19.6	10.6	4.5	4.9	23.6	100.0	84.2	.....	10.5	.....	5.3	.....
$2,100 and under $2,500	2.8	.....	.....	39.1	20.7	7.4	4.8	4.1	23.9	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	2.8	.....	.....	33.4	26.4	8.2	4.5	1.3	26.2	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	39.1	18.6	10.3	5.1	4.3	22.5	100.0	70.4	.....	19.4	.....	10.2	.....

MOBILE, ALA.: Colored families.

Under $900	6	4.5	2.57	$367.63	$120.80	$82.67	$52.02	$22.28	$115.91	$761.30	3	$35.17	1	$28.00	2	+12.92
$900 and under $1,200	28	4.3	3.20	468.31	174.86	92.04	66.27	35.96	196.66	1,034.10	11	73.16	12	42.43	5	+10.56
$1,200 and under $1,500	15	4.7	3.42	561.16	239.15	106.45	77.98	38.34	239.88	1,262.95	7	117.54	4	40.69	4	+44.00
$1,500 and under $1,800	3	5.3	3.61	699.19	301.42	143.75	99.33	54.58	286.16	1,584.43	2	135.13	1	379.00	.....	−36.25
$1,800 and under $2,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	52	4.5	3.21	496.80	194.47	98.10	69.91	36.14	204.98	1,100.39	23	87.10	18	59.94	11	+17.78

PER CENT.

Under $900	11.5	.....	.....	48.3	15.9	10.9	6.8	2.9	15.2	100.0	50.0	.....	16.7	.....	33.3	.....
$900 and under $1,200	53.8	.....	.....	45.3	16.9	8.9	6.4	3.5	19.0	100.0	39.3	.....	42.9	.....	17.9	.....
$1,200 and under $1,500	28.8	.....	.....	44.4	18.9	8.4	6.2	3.0	19.0	100.0	46.7	.....	26.7	.....	26.7	.....
$1,500 and under $1,800	5.8	.....	.....	44.1	19.0	9.1	6.3	3.4	18.1	100.0	66.7	.....	33.3	.....	.....	.....
$1,800 and under $2,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	45.1	17.7	8.9	6.4	3.3	18.6	100.0	44.2	.....	34.6	.....	21.2	.....

NEWBERN, N. C.

Under $900	3	5.0	2.69	$366.28	$141.43	$84.67	$61.43	$51.87	$146.73	$852.40	.....	.....	2	$20.50	1	−$20.50
$900 and under $1,200	5	4.8	2.83	440.28	208.49	145.75	83.98	51.29	220.20	1,149.99	2	$118.25	2	123.10	1	− 1.94
$1,200 and under $1,500	22	4.5	3.01	456.09	248.06	133.34	76.33	67.35	272.29	1,253.46	15	135.83	4	30.43	3	+ 87.08
$1,500 and under $1,800	16	5.1	3.01	475.20	300.88	144.85	75.99	104.14	327.91	1,428.97	16	220.38	.....	.....	.....	+220.38
$1,800 and under $2,100	20	5.7	3.80	573.53	257.60	190.10	94.15	85.56	358.35	1,659.29	18	285.38	2	206.50	.....	+236.19
$2,100 and under $2,500	6	5.7	4.06	645.57	355.02	179.75	95.65	101.92	423.65	1,801.55	6	398.02	.....	.....	.....	+398.02
$2,500 and over	3	6.7	3.86	823.63	385.78	148.60	103.87	37.80	662.67	2,161.85	3	472.53	.....	.....	.....	+472.53
Total	75	5.2	3.31	516.70	295.70	154.13	83.55	79.95	326.33	1,456.36	60	245.71	10	82.19	5	+185.61

PER CENT.

Under $900	4.0	.....	.....	43.0	16.6	9.9	7.2	6.1	17.2	100.0	.....	.....	66.7	.....	33.3	.....
$900 and under $1,200	6.7	.....	.....	38.3	18.1	12.7	7.3	4.5	19.1	100.0	40.0	.....	40.0	.....	20.0	.....
$1,200 and under $1,500	29.3	.....	.....	36.4	19.8	10.6	6.1	5.4	21.7	100.0	68.2	.....	18.2	.....	13.6	.....
$1,500 and under $1,800	21.3	.....	.....	33.3	21.1	10.1	5.3	7.3	22.9	100.0	100.0	.....	.....	.....	.....	.....
$1,800 and under $2,100	26.7	.....	.....	34.6	21.6	11.5	5.7	5.2	21.6	100.0	90.0	.....	10.0	.....	.....	.....
$2,100 and under $2,500	8.0	.....	.....	35.8	19.7	10.0	5.3	5.7	23.5	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	4.0	.....	.....	38.1	17.8	6.9	4.8	1.7	30.7	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	35.5	20.3	10.6	5.7	5.5	22.4	100.0	80.0	.....	13.3	.....	6.7	.....

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

NEW ORLEANS, LA.: White families.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	3	5.3	3.43	$396.89	$101.18	$110.33	$42.84	$46.84	$175.02	$873.11	1	$37.00	1	$166.69	1	−$43.23
$900 and under $1,200	56	4.8	3.08	480.88	139.92	136.94	53.92	36.38	205.78	1,053.82	32	44.84	17	68.57	7	+ 4.81
$1,200 and under $1,500	42	5.1	3.42	538.76	189.63	158.19	60.92	46.42	280.63	1,274.55	31	95.19	10	124.69	1	+ 40.57
$1,500 and under $1,800	37	6.0	3.85	607.07	238.98	171.02	70.91	71.49	358.05	1,517.51	33	105.87	3	53.08	1	+ 90.12
$1,800 and under $2,100	4	5.5	3.27	674.33	285.23	212.72	73.83	71.98	462.04	1,780.13	3	189.83	1	87.00	.....	+120.62
$2,100 and under $2,500	4	9.0	6.34	1,035.67	484.56	181.13	75.99	41.39	449.60	2,268.34	4	93.90	.....	.....	.....	+ 93.90
$2,500 and over	1	6.0	4.41	872.55	383.75	156.00	96.50	145.60	680.60	2,335.00	1	313.00	.....	.....	.....	+313.00
Total	147	5.3	3.48	550.49	193.25	154.44	61.40	50.15	281.70	1,291.44	105	87.38	32	88.30	10	+ 43.19
				PER CENT.												
Under $900	2.0	.....	.....	45.5	11.6	12.6	4.9	5.4	20.0	100.0	33.3	.....	33.3	.....	33.3	.....
$900 and under $1,200	38.1	.....	.....	45.6	13.3	13.0	5.1	3.5	19.5	100.0	57.1	.....	30.4	.....	12.5	.....
$1,200 and under $1,500	28.6	.....	.....	42.3	14.9	12.4	4.8	3.6	22.0	100.0	73.8	.....	23.8	.....	2.4	.....
$1,500 and under $1,800	25.2	.....	.....	40.0	15.7	11.3	4.7	4.7	23.6	100.0	89.2	.....	8.1	.....	2.7	.....
$1,800 and under $2,100	2.7	.....	.....	37.9	16.0	11.9	4.1	4.0	26.0	100.0	75.0	.....	25.0	.....	.....	.....
$2,100 and under $2,500	2.7	.....	.....	45.7	21.4	8.0	3.4	1.8	19.8	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	0.7	.....	.....	37.4	16.4	6.7	4.1	6.2	29.1	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	42.6	15.0	12.0	4.8	3.9	21.8	100.0	71.4	.....	21.8	.....	6.8	.....

NEW ORLEANS, LA.: Colored families.

Under $900	40	4.5	2.97	$401.01	$87.96	$102.86	$42.32	$29.73	$129.23	$793.11	24	$25.32	7	$50.94	9	+$6.28
$900 and under $1,200	51	5.4	3.59	452.30	151.31	113.20	47.76	41.98	209.26	1,015.81	27	41.32	11	65.75	13	+ 7.69
$1,200 and under $1,500	7	6.6	4.64	527.53	239.22	130.61	60.00	53.76	318.28	1,329.39	3	37.83	1	50.00	3	+ 9.07
$1,500 and under $1,800	4	6.8	4.76	682.61	310.92	142.13	56.89	46.04	321.04	1,559.61	2	99.20	1	16.60	1	+45.45
$1,800 and under $2,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	102	5.2	3.47	446.38	138.76	111.47	46.82	38.14	189.74	971.32	56	36.34	20	57.32	26	+ 8.71

PER CENT.

Under $900	39.2	.....	.....	50.6	11.1	13.0	5.3	3.7	16.3	100.0	60.0	.....	17.5	.....	22.5	.....
$900 and under $1,200	50.0	.....	.....	44.5	14.9	11.1	4.7	4.1	20.6	100.0	52.9	.....	21.6	.....	25.5	.....
$1,200 and under $1,500	6.9	.....	.....	39.7	18.0	9.8	4.5	4.0	23.9	100.0	42.9	.....	14.3	.....	42.9	.....
$1,500 and under $1,800	3.9	.....	.....	43.8	19.9	9.1	3.6	3.0	20.6	100.0	50.0	.....	25.0	.....	25.0	.....
$1,800 and under $2,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	46.0	14.3	11.5	4.8	3.9	19.5	100.0	54.9	.....	19.6	.....	25.5	.....

NORFOLK, VA.

Under $900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$900 and under $1,200	4	5.0	3.13	$421.73	$138.67	$134.63	$85.45	$35.85	$180.75	$997.06	2	$196.50	1	$32.00	1	+$90.25
$1,200 and under $1,500	17	4.7	3.00	513.85	261.74	163.22	79.07	105.78	225.18	1,348.84	11	93.30	4	148.68	2	+ 25.39
$1,500 and under $1,800	25	4.8	3.17	513.84	298.83	190.85	79.85	105.85	296.26	1,485.49	23	170.87	2	101.46	.....	+149.09
$1,800 and under $2,100	25	5.0	3.51	637.52	396.85	204.81	95.41	113.87	317.55	1,766.01	21	247.83	3	43.13	1	+203.00
$2,100 and under $2,500	19	5.3	3.41	645.41	465.16	244.45	103.50	116.82	441.81	2,017.14	16	373.44	2	33.00	1	+311.00
$2,500 and over	10	5.8	4.18	725.10	434.14	194.98	112.01	157.67	572.17	2,196.06	10	479.62	.....	.....	.....	+479.62
Total	100	5.1	3.37	587.20	355.76	197.99	91.54	112.31	340.13	1,684.92	83	256.93	12	85.42	5	+203.00

PER CENT.

Under $900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$900 and under $1,200	4.0	.....	.....	42.3	13.9	13.5	8.6	3.6	18.1	100.0	50.0	.....	25.0	.....	25.0	.....
$1,200 and under $1,500	17.0	.....	.....	38.1	19.4	12.1	5.9	7.8	16.7	100.0	64.7	.....	23.5	.....	11.8	.....
$1,500 and under $1,800	25.0	.....	.....	34.6	20.1	12.8	5.4	7.1	19.9	100.0	92.0	.....	8.0	.....	.....	.....
$1,800 and under $2,100	25.0	.....	.....	36.1	22.5	11.6	5.4	6.4	18.0	100.0	84.0	.....	12.0	.....	4.0	.....
$2,100 and under $2,500	19.0	.....	.....	32.0	23.1	12.1	5.1	5.8	21.9	100.0	84.2	.....	10.5	.....	5.3	.....
$2,500 and over	10.0	.....	.....	33.0	19.8	8.9	5.1	7.2	26.1	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	34.9	21.1	11.8	5.4	6.7	20.2	100.0	83.0	.....	12.0	.....	5.0	.....

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

OKLAHOMA CITY, OKLA.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	2	4.0	2.40	$401.01	$172.88	$153.50	$43.93	$124.78	$151.04	$1,047.13	.....	.....	2	$160.34	.....	−$160.34
$900 and under $1,200	13	4.5	2.54	484.54	170.94	[1] 180.68	[1] 49.69	85.06	246.48	1,216.44	5	$56.78	7	180.18	1	− 75.18
$1,200 and under $1,500	34	4.8	3.12	499.39	210.34	200.42	51.48	73.13	265.32	1,300.07	24	126.70	7	131.35	3	+ 62.39
$1,500 and under $1,800	26	4.5	3.00	535.51	263.74	292.26	60.81	100.09	412.71	1,665.13	13	164.46	13	274.24	.....	− 54.89
$1,800 and under $2,100	15	4.1	2.33	510.53	245.92	[1] 311.76	[1] 65.49	102.72	568.47	1,800.29	11	283.47	4	209.53	.....	+ 152.00
$2,100 and under $2,500	9	6.0	3.89	658.85	359.78	302.39	72.50	155.72	393.23	1,942.47	9	329.12	.....	.....	.....	+ 329.12
$2,500 and over	1	5.0	3.21	781.37	500.95	240.00	80.80	27.08	742.15	2,372.35	1	321.31	.....	.....	.....	+ 321.31
Total	100	4.7	2.95	523.73	240.05	[2] 242.14	[2] 56.66	94.13	360.66	1,522.63	63	188.32	33	209.23	4	+ 49.60
	PER CENT.															
Under $900	2.0	.....	.....	38.3	16.5	14.7	4.2	11.9	14.4	100.0	.....	.....	100.0	.....	.....	.....
$900 and under $1,200	13.0	.....	.....	39.8	14.1	[1] 14.7	[1] 4.0	7.0	20.3	100.0	38.5	.....	53.8	.....	7.7	.....
$1,200 and under $1,500	34.0	.....	.....	38.4	16.2	15.4	4.0	5.6	20.4	100.0	70.6	.....	20.6	.....	8.8	.....
$1,500 and under $1,800	26.0	.....	.....	32.2	15.8	17.6	3.7	6.0	24.8	100.0	50.0	.....	50.0	.....	.....	.....
$1,800 and under $2,100	15.0	.....	.....	28.4	13.7	[1] 17.6	[1] 3.7	5.7	31.6	100.0	73.3	.....	26.7	.....	.....	.....
$2,100 and under $2,500	9.0	.....	.....	33.9	18.5	15.6	3.7	8.0	20.2	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	1.0	.....	.....	32.9	21.1	10.1	3.4	1.1	31.3	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	34.4	15.8	[2] 16.3	[2] 3.8	6.2	23.7	100.0	63.0	.....	33.0	.....	4.0	.....

OMAHA, NEBR.

Under $900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$900 and under $1,200	8	4.0	2.68	$428.10	$138.87	$166.50	$87.13	$59.39	$221.21	$1,101.20	4	$62.64	2	$178.41	2	−$13.28
$1,200 and under $1,500	46	4.4	2.77	516.59	183.28	[1] 192.41	[1] 107.32	69.89	279.26	1,348.35	25	71.45	19	111.50	2	− 7.22
$1,500 and under $1,800	24	5.0	3.13	572.74	242.71	227.17	109.53	81.40	290.97	1,524.52	19	142.45	4	66.95	1	+101.62
$1,800 and under $2,100	15	5.2	3.71	615.25	263.25	294.48	127.28	50.58	397.08	1,747.92	12	248.18	3	27.56	.....	+193.03
$2,100 and under $2,500	5	5.4	4.17	753.80	474.53	267.43	130.82	115.67	502.63	2,244.87	4	207.60	1	202.00	.....	+125.68
$2,500 and over	4	6.8	5.09	795.27	468.02	336.50	138.79	159.97	533.38	2,431.92	4	348.48	.....	.....	.....	+348.48
Total	102	4.8	3.15	559.93	230.98	[1] 223.19	[1] 111.62	74.71	315.70	1,515.62	68	146.26	29	104.41	5	+ 67.82

Total	102	4.8	3.15	559.93	230.98	[1] 223.19	[1] 111.62	74.71	315.70	1,515.62	68	146.26	29	104.41	5	+ 67.82

PER CENT.

Under $900																
$900 and under $1,200	7.8			38.9	12.6	15.1	7.9	5.4	20.1	100.0	50.0		25.0		25.0	
$1,200 and under $1,500	45.1			38.3	13.6	[1] 14.3	[1] 7.9	5.2	20 7	100.0	54.3		41.3		4.3	
$1,500 and under $1,800	23.5			37.6	15.9	14.9	7.2	5.3	19.1	100.0	79.2		16.7		4.2	
$1,800 and under $2,100	14.7			35.2	15.1	16.8	7.3	2.9	22.7	100.0	80.0		20.0			
$2,100 and under $2,500	4.9			33.6	21.1	11.9	5.8	5.2	22.4	100.0	80.0		20.0			
$2,500 and over	3.9			32.7	19.2	13.8	5.7	6.6	21.9	100.0	100.0					
Total	100.0			36.9	15.2	[1] 14.7	[1] 7.4	4.9	20.8	100.0	66.7		28.4		4.9	

PORTLAND, OREG.

Under $900																
$900 and under $1,200	20	4.1	2.93	$437.05	$166.07	[1] $180.56	[1] $69.87	$50.41	$203.80	$1,098.45	14	$88.23	6	$122.70		+$24.95
$1,200 and under $1,500	38	4.7	2.99	497.09	191.49	[2] 168.10	[2] 71.47	62.93	295.56	1,286.89	30	146.58	7	237.86		+ 71.91
$1,500 and under $1,800	48	4.8	3.28	519.92	251.08	[3] 176.83	[3] 73.99	105.84	380.74	1,512.66	34	220.94	13	163.87	1	+112.12
$1,800 and under $2,100	27	4.6	3.10	513.31	255.78	[1] 224.88	[1] 78.96	140.50	520.30	1,733.37	29	386.45	7	330.36	1	+200.61
$2,100 and under $2,500	14	5.6	3.93	664.77	391.56	260.56	85.76	104.49	624.05	2,131.19	10	315.34	4	209.99		+165.25
$2,500 and over	5	6.0	4.58	739.63	448.63	316.74	92.75	89.66	632.82	2,320.23	4	511.15	1	540.70		+300.78
Total	152	4.8	3.23	522.70	245.27	[4] 196.68	[4] 74.32	93.32	391.66	1,524.45	112	232.78	38	216.44	2	+117.41

PER CENT.

Under $900																
$900 and under $1,200	13.2			39 8	15.1	[1] 16.7	[1] 5.6	4.6	18.6	100.0	70.0		30.0			
$1,200 and under $1,500	25.0			38.6	14.9	[2] 13.0	[2] 5.5	4.9	23.0	100.0	78.9		18.4			
$1,500 and under $1,800	31.6			34.4	16.6	[3] 11.7	[3] 4.9	7.0	25.2	100.0	70.8		27.1		2.6	
$1,800 and under $2,100	17.8			29.6	14.8	[1] 12.8	[1] 4.5	8.1	30.0	100.0	74.1		25.9		2.1	
$2,100 and under $2,500	9.2			31.2	18.4	12.2	4.0	4.9	29.3	100.0	71.4		28.6			
$2,500 and over	3.3			31.9	19.3	13.7	4.0	3.9	27.3	100.0	80.0		20.0			
Total	100.0			34.3	16.1	[4] 12.8	[4] 4.9	6.1	25.7	100.0	73.7		25.0		1.3	

[1] Not including 1 family in which rent is combined with fuel and light.
[2] Not including 2 families in which rent is combined with fuel and light.
[3] Not including 3 families in which rent is combined with fuel and light.
[4] Not including 7 families in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

PUEBLO, COLO.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900																
$900 and under $1,200	8	4.6	2.71	$479.00	$159.65	$118.00	$78.93	$39.28	$184.35	$1,059.21	5	$104.36	3	$69.85		+$39.03
$1,200 and under $1,500	25	4.9	3.08	514.47	206.34	178.72	86.63	84.93	286.03	1,357.12	13	82.09	12	94.92		− 2.87
$1,500 and under $1,800	20	4.3	2.90	551.16	222.14	199.75	88.27	135.61	349.08	1,546.01	15	170.22	5	51.61		+114.77
$1,800 and under $2,100	20	4.3	3.03	545.13	301.28	[1]248.00	[1]104.72	128.13	394.39	1,730.56	19	225.01	1	46.70		+211.43
$2,100 and under $2,500	5	5.8	3.75	644.16	247.44	259.20	97.49	145.40	515.53	1,909.21	5	339.52				+339.52
$2,500 and over	1	5.0	4.70	728.51	457.25	180.00	87.96	92.50	334.70	1,880.92	1	634.88				+634.88
Total	79	4.6	3.05	538.85	235.42	[1]199.94	[1]91.38	108.00	334.27	1,510.89	58	185.35	21	78.73		+115.15
	PER CENT.															
Under $900																
$900 and under $1,200	10.1			45.2	15.1	11.1	7.5	3.7	17.4	100.0	62.5		37.5			
$1,200 and under $1,500	31.6			37.9	15.2	13.2	6.4	6.3	21.1	100.0	52.0		48.0			
$1,500 and under $1,800	25.3			35.7	14.4	12.9	5.7	8.8	22.6	100.0	75.0		25.0			
$1,800 and under $2,100	25.3			31.5	17.4	[1]14.3	[1]6.0	7.4	22.8	100.0	95.0		5.0			
$2,100 and under $2,500	6.3			33.7	13.0	13.6	5.1	7.6	27.0	100.0	100.0					
$2,500 and over	1.3			38.7	24.3	9.6	4.7	4.9	17.8	100.0	100.0					
Total	100.0			35.7	15.6	[1]13.3	[1]6.1	7.1	22.1	100.0	73.4		26.6			

RICHMOND, VA.

Under $900	3	5.0	3.41	$376.48	$83.17	$109.33	$49.92	$27.12	$126.13	$772.16	2	$36.98	1	$32.33		+$13.88
$900 and under $1,200	49	5.0	3.35	483.07	145.80	102.85	63.34	53.45	189.36	1,037.87	19	82.74	20	96.53	10	− 7.32
$1,200 and under $1,500	50	4.9	3.34	514.98	201.92	142.70	74.14	67.11	310.06	1,310.32	32	92.34	15	133.63	3	+ 19.01
$1,500 and under $1,800	25	5.2	3.92	655.87	273.38	164.01	81.58	55.99	337.96	1,568.79	19	117.31	5	145.09	1	+ 60.14
$1,800 and under $2,100	18	5.8	4.05	707.20	293.20	184.82	100.90	92.43	406.02	1,784.56	14	226.20	4	146.75		+143.32
$2,100 and under $2,500	5	6.2	4.64	784.00	406.98	269.20	117.50	72.57	454.87	2,105.12	4	326.40	1	115.00		+238.12
$2,500 and over	3	8.0	6.57	939.70	450.60	195.67	104.51	173.97	510.06	2,374.50	3	410.00				+410.00
Total	153	5.2	3.63	564.80	215.61	142.70	76.58	65.39	292.30	1,357.38	93	134.75	46	117.28	14	+ 46.65

Total	153	5.2	3.63	564.80	215.61	142.70	76.58	65.39	292.30	1,357.38	93	134.75	46	117.28	14	+ 46.65

PER CENT.

Under $900	2.0	.....	.....	48.8	10.8	14.2	6.5	3.5	16.3	100.0	66.7	.....	33.3	.....	.....	.....
$900 and under $1,200	32.0	.....	.....	46.5	14.0	9.9	6.1	5.2	18.2	100.0	38.8	.....	40.8	.....	20.4	.....
$1,200 and under $1,500	32.7	.....	.....	39.3	15.4	10.8	5.7	5.1	23.7	100.0	64.0	.....	30.0	.....	6.0	.....
$1,500 and under $1,800	16.3	.....	.....	41.8	17.4	10.5	5.2	3.6	21.5	100.0	76.0	.....	20.0	.....	4.0	.....
$1,800 and under $2,100	11.8	.....	.....	39.6	16.4	10.4	5.7	5.2	22.8	100.0	77.8	.....	22.2	.....	.....	.....
$2,100 and under $2,500	3.3	.....	.....	37.2	19.3	12.8	5.6	3.4	21.6	100.0	80.0	.....	20.0	.....	.....	.....
$2,500 and over	2.0	.....	.....	39.6	19.0	8.2	4.4	7.3	21.5	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	41.6	15.9	10.5	5.6	4.8	21.5	100.0	60.8	.....	30.1	.....	9.2	.....

ROANOKE, VA.

Under $900	3	4.7	3.15	$381.02	$112.78	$152.87	$76.95	$29.90	$236.01	$989.53	1	$25.00	1	$430.30	1	−$135.10
$900 and under $1,200	8	4.8	3.85	447.48	204.06	124.85	68.40	48.33	221.82	1,114.93	3	151.00	5	176.75	.....	− 53.85
$1,200 and under $1,500	12	4.5	3.07	454.69	279.02	[1] 182.23	[1] 79.13	127.97	367.78	1,488.21	1	23.10	8	262.76	3	+ 173.25
$1,500 and under $1,800	17	5.9	3.51	564.27	267.53	[1] 236.21	[1] 90.95	94.84	373.29	1,618.92	9	239.05	7	200.72	1	+ 2.73
$1,800 and under $2,100	21	5.8	3.77	637.80	334.81	347.66	94.22	114.30	418.29	1,847.08	12	329.73	9	217.76	.....	+ 95.09
$2,100 and under $2,500	9	6.0	3.88	703.50	375.57	293.23	106.09	76.44	518.31	2,073.14	8	174.04	.....	.....	1	+ 174.04
$2,500 and over	12	5.3	3.89	635.82	460.93	268.73	96.76	214.02	586.47	2,262.73	9	611.82	3	236.84	.....	− 399.66
Total	82	5.4	3.63	574.72	314.75	[2] 228.83	[2] 89.98	113.18	411.32	1,730.10	43	314.14	33	248.23	6	+ 64.84

PER CENT.

Under $900	3.7	.....	.....	38.5	11.4	15.4	7.8	3.0	23.9	100.0	33.3	.....	33.3	.....	33.3	.....
$900 and under $1,200	9.8	.....	.....	40.1	18.3	11.2	6.1	4.3	19.9	100.0	37.5	.....	62.5	.....	.....	.....
$1,200 and under $1,500	14.6	.....	.....	30.6	18.7	[1] 12.1	[1] 5.3	8.6	24.7	100.0	8.3	.....	66.7	.....	25.0	.....
$1,500 and under $1,800	20.7	.....	.....	34.9	16.5	[1] 14.3	[1] 5.5	5.9	23.1	100.0	52.9	.....	41.2	.....	5.9	.....
$1,800 and under $2,100	25.6	.....	.....	34.5	18.1	13.4	5.1	6.2	22.6	100.0	57.1	.....	42.9	.....	.....	.....
$2,100 and under $2,500	11.0	.....	.....	33.9	18.1	14.1	5.1	3.7	25.0	100.0	88.9	.....	.....	.....	11.1	.....
$2,500 and over	14.6	.....	.....	28.1	20.4	11.9	4.3	9.5	25.9	100.0	75.0	.....	25.0	.....	.....	.....
Total	100.0	.....	.....	33.2	18.2	[2] 13.1	[2] 5.2	6.5	23.8	100.0	52.4	.....	40.2	.....	7.3	.....

[1] Not including 1 family in which rent is combined with fuel and light.

[2] Not including 2 families in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

SACRAMENTO, CALIF.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900																
$900 and under $1,200	11	4.2	2.61	$379.59	$157.06	$206.29	$66.10	$39.09	$208.38	$1,056.52	7	$70.56	4	$61.14		+$22.67
$1,200 and under $1,500	39	4.3	3.03	453.81	219.45	201.05	73.59	69.98	281.30	1,299.17	26	127.47	11	126.77	2	+ 49.22
$1,500 and under $1,800	37	4.8	3.30	504.79	255.99	216.54	76.21	90.51	381.60	1,525.65	31	174.94	6	95.23		+131.13
$1,800 and under $2,100	12	5.0	3.58	544.09	288.39	225.46	75.05	90.03	576.25	1,799.26	10	160.62	2	40.93		+127.03
$2,100 and under $2,500	5	5.6	4.44	661.88	374.25	250.80	76.95	112.40	392.14	1,868.41	4	534.08	1	123.00		+402.62
$2,500 and over	8	4.7	3.74	647.22	404.57	310.00	87.38	150.07	558.53	2,157.77	3	751.03				+751.03
Total	107	4.6	3.23	489.08	245.83	215.06	74.43	80.38	354.52	1,459.30	81	187.98	24	100.64	2	+119.73
	PER CENT.															
Under $900																
$900 and under $1,200	10.3			35.9	14.9	19.5	6.3	3.7	19.7	100.0	63.6		36.4			
$1,200 and under $1,500	36.4			34.9	16.9	15.5	5.7	5.4	21.7	100.0	66.7		28.2		5.1	
$1,500 and under $1,800	34.6			33.1	16.8	14.2	5.0	5.9	25.0	100.0	83.8		16.2			
$1,800 and under $2,100	11.2			30.2	16.0	12.5	4.2	5.0	32.0	100.0	83.3		16.7			
$2,100 and under $2,500	4.7			35.4	20.0	13.4	4.1	6.0	21.0	100.0	80.0		20.0			
$2,500 and over	2.8			30.0	18.7	14.4	4.0	7.0	25.9	100.0	100.0					
Total	100.0			33.5	16.8	14.7	5.1	5.5	24.3	100.0	75.7		22.4		1.9	

ST. LOUIS, MO., and EAST ST. LOUIS, ILL.: White families.

Under $900	5	4.0	2.99	$398.30	$93.05	$130.20	$44.71	$36.98	$176.04	$879.28	1	$43.65	3	$97.83	1	−$49.97
$900 and under $1,200	57	4.2	3.04	456.92	147.74	[1] 151.06	[1] 55.60	51.52	219.97	1,083.07	33	74.52	18	127.20	6	+ 2.98
$1,200 and under $1,500	87	4.4	2.94	496.99	175.77	178.61	64.10	61.75	274.10	1,251.31	62	115.90	15	94.93	10	+ 66.23
$1,500 and under $1,800	37	4.8	3.29	539.46	244.98	190.64	71.53	103.38	338.13	1,488.11	32	154.66	5	136.38		+115.33
$1,800 and under $2,100	28	4.9	3.54	583.87	257.36	220.39	78.02	103.79	418.42	1,661.85	26	285.70	2	82.15		+259.42
$2,100 and under $2,500	8	6.0	4.44	765.28	396.38	208.88	88.39	111.03	521.40	2,091.35	6	238.12	1	168.51	1	+157.53
$2,500 and over	5	7.2	5.19	848.54	468.46	247.80	105.87	208.57	677.93	2,557.17	4	258.30			1	+206.64
Total	227	4.6	3.20	519.59	202.48	[1] 180.46	[1] 66.29	75.58	304.20	1,348.48	164	149.56	44	114.13	19	+ 85.93

PER CENT.

Under $900	2.2	.....	.....	45.3	10.6	14.8	5.1	4.2	20.0	100.0	20.0	.....	60.0	.....	20.0	.....
$900 and under $1,200	25.1	.....	.....	42.2	13.6	[1] 14.0	[1] 5.1	4.8	20.3	100.0	57.9	.....	31.6	.....	10.5	.....
$1,200 and under $1,500	38.3	.....	.....	39.7	14.0	14.3	5.1	4.9	21.9	100.0	71.3	.....	17.2	.....	11.5	.....
$1,500 and under $1,800	16.3	.....	.....	36.3	16.5	12.8	4.8	6.9	22.7	100.0	86.5	.....	13.5	.....	.....	.....
$1,800 and under $2,100	12.3	.....	.....	35.1	15.5	13.3	4.7	6.2	25.2	100.0	92.9	.....	7.1	.....	.....	.....
$2,100 and under $2,500	3.5	.....	.....	36.6	19.0	10.0	4.2	5.3	24.9	100.0	75.0	.....	12.5	.....	12.5	.....
$2,500 and over	2.2	.....	.....	33.2	18.3	9.7	4.1	8.2	26.5	100.0	80.0	.....	.....	.....	20.0	.....
Total	100.0	.....	.....	38.5	15.0	[1] 13.4	[1] 4.9	5.6	22.6	100.0	72.2	.....	19.4	.....	8.4	.....

ST. LOUIS, MO.: Colored families.

Under $900	5	3.4	2.61	$370.08	$86.35	$88.80	$44.65	$10.42	$155.75	$756.05	2	$134.26	1	$0.78	2	+$53.55
$900 and under $1,200	39	5.3	3.48	477.89	142.23	145.74	56.19	54.98	213.09	1,090.12	17	34.95	14	45.49	8	− 1.09
$1,200 and under $1,500	25	6.0	3.72	505.53	202.74	172.49	65.59	70.89	276.94	1,294.17	15	88.52	6	33.99	4	+ 44.95
$1,500 and under $1,800	5	6.0	4.36	570.51	238.87	169.24	69.06	94.20	388.64	1,530.53	3	112.21	1	13.90	1	+ 64.55
$1,800 and under $2,100	2	8.5	4.56	784.60	266.30	298.63	85.50	78.33	438.03	1,951.38	1	21.50	1	49.60	.....	− 14.05
$2,100 and under $2,500	2	9.0	6.79	1,008.54	425.18	180.00	68.40	47.40	419.74	2,149.25	1	78.00	.....	.....	1	+ 39.00
$2,500 and over	1	7.0	5.95	1,027.16	496.70	220.00	69.60	152.00	575.00	2,540.46	1	183.00	.....	.....	.....	+183.00
Total	79	5.6	3.70	513.83	178.75	157.76	60.47	61.31	256.29	1,228.40	40	70.24	23	39.35	16	+ 24.11

PER CENT.

Under $900	6.3	.....	.....	48.9	11.4	11.7	5.9	1.4	20.6	100.0	40.0	.....	20.0	.....	40.0	.....
$900 and under $1,200	49.4	.....	.....	43.8	13.0	13.4	5.2	5.0	19.5	100.0	43.6	.....	35.9	.....	20.5	.....
$1,200 and under $1,500	31.6	.....	.....	39.1	15.7	13.3	5.1	5.5	21.4	100.0	60.0	.....	24.0	.....	16.0	.....
$1,500 and under $1,800	6.3	.....	.....	37.3	15.6	11.1	4.5	6.2	25.4	100.0	60.0	.....	20.0	.....	20.0	.....
$1,800 and under $2,100	2.5	.....	.....	40.2	13.6	15.3	4.4	4.0	22.4	100.0	50.0	.....	50.0	.....	.....	.....
$2,100 and under $2,500	2.5	.....	.....	46.9	19.8	8.4	3.2	2.2	19.5	100.0	50.0	.....	.....	.....	50.0	.....
$2,500 and over	1.3	.....	.....	40.4	19.6	8.7	2.7	6.0	22.6	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	41.8	14.6	12.8	4.9	5.0	20.9	100.0	50.6	.....	29.1	.....	20.3	.....

[1] Not including 1 family in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

SALT LAKE CITY, UTAH.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900																
$900 and under $1,200	18	4.7	2.97	$462.27	$169.20	$157.81	$76.71	$68.29	$225.50	$1,159.78	7	$54.37	11	$93.41		−$35.94
$1,200 and under $1,500	23	5.0	3.01	453.49	217.30	189.90	84.56	82.69	305.65	1,333.58	12	111.80	9	144.12	2	+ 1.94
$1,500 and under $1,800	28	4.9	3.24	501.09	259.09	236.43	91.75	105.68	361.91	1,555.94	21	154.07	7	42.31		+104.98
$1,800 and under $2,100	24	5.7	3.94	624.98	314.96	250.58	101.12	114.66	382.42	1,788.72	18	192.74	5	101.73	1	+123.36
$2,100 and under $2,500	9	5.9	4.18	637.82	369.95	235.44	105.87	136.46	541.11	2,026.64	8	239.47	1	61.40		+206.04
$2,500 and over	1	8.0	5.65	778.50	721.30	360.00	134.00	82.25	851.35	2,927.40	1	65.60				+ 65.60
Total	103	5.2	3.41	527.18	261.24	216.71	91.34	98.57	350.70	1,545.74	67	155.35	33	96.69	3	+ 70.07
	PER CENT.															
Under $900																
$900 and under $1,200	17.5			39.9	14.6	13.6	6.6	5.9	19.4	100.0	38.9		61.1			
$1,200 and under $1,500	22.3			34.0	16.3	14.2	6.3	6.2	22.9	100.0	52.2		39.1		8.7	
$1,500 and under $1,800	27.2			32.2	16.7	15.2	5.9	6.8	23.3	100.0	75.0		25.0			
$1,800 and under $2,100	23.3			34.9	17.6	14.0	5.7	6.4	21.4	100.0	75.0		20.8		4.2	
$2,100 and under $2,500	8.7			31.5	18.3	11.6	5.2	6.7	26.7	100.0	88.9		11.1			
$2,500 and over	1.0			26.6	24.6	12.3	4.6	2.8	29.1	100.0	100.0					
Total	100.0			34.1	16.9	14.0	5.9	6.4	22.7	100.0	65.0		32.0		2.9	

SAN FRANCISCO and OAKLAND, CALIF.

Under $900	2	4.0	3.30	$371.08	$133.92	$132.00	$42.30	$26.65	$154.58	$860.52			1	$159.50	1	−$79.75
$900 and under $1,200	38	4.1	2.71	470.94	177.19	171.60	51.69	50.36	228.66	1,150.43	15	$66.01	20	162.80	3	− 59.63
$1,200 and under $1,500	114	4.5	2.99	513.97	204.01	205.27	56.67	47.99	264.43	1,292.34	78	126.51	34	97.28	2	+ 57.55
$1,500 and under $1,800	86	4.7	3.27	586.89	275.11	[1] 220.07	[1] 61.40	69.36	353.72	1,565.95	61	167.73	23	199.21	2	+ 65.69
$1,800 and under $2,100	44	4.1	3.00	567.23	280.09	242.17	68.38	85.45	439.98	1,683.30	40	267.06	3	80.21	1	+237.31
$2,100 and under $2,500	15	4.5	3.22	675.25	313.31	252.81	66.59	69.54	506.05	1,883.55	13	442.02	2	132.96		+365.35
$2,500 and over	2	8.5	6.56	1,192.13	634.93	385.00	126.18	69.93	597.53	3,005.69	2	190.77				+190.77
Total	301	4.5	3.07	548.75	239.90	[1] 213.70	[1] 59.96	60.95	324.61	1,447.73	209	181.34	83	142.31	9	+ 86.67

Total	301	4.3	3.07													

PER CENT.

Under $900	0.7	.....	.....	43.1	15.6	15.3	4.9	3.1	18.0	100.0	.....	.....	50.0	.....	50.0	.....
$900 and under $1,200	12.6	.....	.....	40.9	15.4	14.9	4.5	4.4	19.9	100.0	39.5	.....	52.6	.....	7.9	.....
$1,200 and under $1,500	37.9	.....	.....	39.8	15.8	15.9	4.4	3.7	20.5	100.0	68.4	.....	29.8	.....	1.8	.....
$1,500 and under $1,800	28.6	.....	.....	37.5	17.6	[1] 14.0	[1] 3.9	4.4	22.6	100.0	70.9	.....	26.7	.....	2.3	.....
$1,800 and under $2,100	14.6	.....	.....	33.7	16.6	14.4	4.1	5.1	26.1	100.0	90.9	.....	6.8	.....	2.3	.....
$2,100 and under $2,500	5.0	.....	.....	35.8	16.6	13.4	3.5	3.7	26.9	100.0	86.7	.....	13.3	.....	.....	.....
$2,500 and over	.7	.....	.....	39.7	21.1	12.8	4.2	2.3	19.9	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	37.9	16.6	[1] 14.8	[1] 4.1	4.2	22.4	100.0	69.4	.....	27.6	.....	3.0	.....

SAVANNAH, GA.: White families.

Under $900	2	3.5	2.88	$364.80	$101.75	$142.50	$77.40	$14.83	$104.73	$806.00	1	$100.50	.....	.....	1	+$50.25
$900 and under $1,200	8	3.8	2.57	398.83	148.72	147.20	65.38	45.90	199.47	1,005.50	8	100.50	.....	.....	.....	+100.50
$1,200 and under $1,500	21	4.4	2.88	426.95	226.94	169.05	76.77	63.72	257.97	1,221.39	17	135.65	1	$25.00	3	+108.62
$1,500 and under $1,800	23	4.8	3.08	484.96	274.92	194.09	79.20	89.39	324.64	1,447.19	20	233.30	1	150.00	2	+196.35
$1,800 and under $2,100	19	5.8	3.68	599.97	343.18	214.19	95.26	70.01	441.65	1,764.26	16	188.81	3	197.00	.....	+127.89
$2,100 and under $2,500	4	5.3	3.92	616.16	376.38	249.00	104.16	79.74	691.96	2,117.40	4	252.58	.....	.....	.....	+252.58
$2,500 and over	3	6.3	4.07	791.79	534.69	185.00	99.23	175.55	472.28	2,258.53	3	338.47	.....	.....	.....	+338.47
Total	80	4.9	3.19	503.50	276.40	188.72	82.95	74.59	340.82	1,466.96	69	187.29	5	153.20	6	+151.97

PER CENT.

Under $900	2.5	.....	.....	45.3	12.6	17.7	9.6	1.8	13.0	100.0	50.0	.....	.....	.....	50.0	.....
$900 and under $1,200	10.0	.....	.....	39.7	14.8	14.6	6.5	4.6	19.8	100.0	100.0	.....	.....	.....	.....	.....
$1,200 and under $1,500	26.3	.....	.....	35.0	18.6	13.8	6.3	5.2	21.1	100.0	81.0	.....	4.8	.....	14.3	.....
$1,500 and under $1,800	28.8	.....	.....	33.5	19.0	13.4	5.5	6.2	22.4	100.0	87.0	.....	4.3	.....	8.7	.....
$1,800 and under $2,100	23.8	.....	.....	34.0	19.5	12.1	5.4	4.0	25.6	100.0	84.2	.....	15.8	.....	.....	.....
$2,100 and under $2,500	5.0	.....	.....	29.1	17.8	11.8	4.9	3.8	32.7	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	3.8	.....	.....	35.1	23.7	8.2	4.4	7.8	20.9	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	34.3	18.8	12.9	5.7	5.1	23.2	100.0	86.3	.....	6.3	.....	7.5	.....

[1] Not including 1 family in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

SAVANNAH, GA.: Colored families.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (−) or deficit (+) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	4	3.5	2.85	$371.29	$113.71	$90.50	$48.69	$21.35	$110.52	$756.05	1	$8.00	1	$35.00	2	− $6.75
$900 and under $1,200	24	4.4	2.90	418.39	173.03	91.08	76.08	44.06	242.06	1,044.69	9	104.51	6	44.77	9	+ 28.00
$1,200 and under $1,500	15	4.3	3.04	495.70	244.77	114.30	73.32	87.81	285.49	1,301.38	10	77.44	1	86.00	4	+ 45.89
$1,500 and under $1,800	4	4.8	3.73	540.64	377.46	161.00	66.56	103.02	271.38	1,520.06	3	152.00	.....	.....	1	+114.00
$1,800 and under $2,100	3	5.3	3.60	576.75	395.71	164.00	75.80	153.53	525.95	1,891.74	3	102.06	.....	.....	.....	+102.06
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	50	4.4	3.05	457.09	219.52	107.97	72.28	66.65	263.94	1,187.46	26	95.58	8	48.71	16	+ 41.91
	PER CENT.															
Under $900	8.0	.....	.....	49.1	15.0	12.0	6.4	2.8	14.6	100.0	25.0	.....	25.0	.....	50.0	.....
$900 and under $1,200	48.0	.....	.....	40.0	16.6	8.7	7.3	4.2	23.2	100.0	37.5	.....	25.0	.....	37.5	.....
$1,200 and under $1,500	30.0	.....	.....	38.1	18.8	8.8	5.6	6.7	21.9	100.0	66.7	.....	6.7	.....	26.7	.....
$1,500 and under $1,800	8.0	.....	.....	35.6	24.8	10.6	4.4	6.8	17.9	100.0	75.0	.....	.....	.....	25.0	.....
$1,800 and under $2,100	6.0	.....	.....	30.5	20.9	8.7	4.0	8.1	27.8	100.0	100.0	.....	.....	.....	.....	.....
$2,100 and under $2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$2,500 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100.0	.....	.....	38.5	18.5	9.1	6.1	5.6	22.2	100.0	52.0	.....	16.0	.....	32.0	.....

SEATTLE, WASH.

Under $900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$900 and under $1,200	11	4.2	2.78	$435.82	$169.67	[1] $102.05	[1] $56.00	$70.14	$234.66	$1,133.67	8	$50.15	3	$180.28	.....	−$12.70
$1,200 and under $1,500	60	4.5	2.98	498.27	198.08	[2] 211.27	[2] 76.28	67.05	302.83	1,354.93	37	115.33	22	175.93	1	+ 6.61
$1,500 and under $1,800	73	4.3	2.81	512.54	250.37	[3] 238.25	[3] 83.36	78.71	360.63	1,526.86	57	176.72	16	144.25	.....	+106.37
$1,800 and under $2,100	38	4.3	2.91	564.30	294.09	[2] 275.08	[2] 96.41	81.19	467.08	1,775.68	31	207.88	7	244.51	.....	+124.54
$2,100 and under $2,500	10	4.9	3.31	555.80	275.29	[4] 279.16	[4] 99.20	150.48	679.13	2,045.16	7	348.82	3	235.16	.....	+173.63
$2,500 and over	5	5.8	3.67	629.47	459.29	[1] 293.05	[1] 104.70	110.25	728.97	2,296.22	5	489.02	.....	.....	.....	+489.02
Total	197	4.4	2.92	518.45	245.06	[5] 235.70	[5] 83.31	79.60	382.04	1,546.37	145	179.81	51	179.14	1	+ 85.97

PER CENT.

Under $900																
$900 and under $1,200	5.6			38.4	15.0	[1] 14.5	[1] 5.0	6.2	20.7		72.7		27.3			
$1,200 and under $1,500	30.5			36.6	14.6	[2] 15.8	[2] 5.7	4.9	22.4		61.7		36.7		1.7	
$1,500 and under $1,800	37.1			33.6	16.4	[3] 15.7	[3] 5.5	5.2	23.6		78.1		21.9			
$1,800 and under $2,100	19.3			31.8	16.6	[2] 15.6	[2] 5.5	4.6	26.3		81.6		18.4			
$2,100 and under $2,500	5.1			27.2	13.5	[4] 13.0	[4] 4.6	7.4	33.2		70.0		30.0			
$2,500 and over	2.5			27.4	20.0	[1] 12.0	[1] 4.3	4.8	31.7		100.0					
Total	100.0			33.5	15.8	[5] 15.4	[5] 5.4	5.1	24.7		73.6		25.8		0.5	

SPOKANE, WASH.

Under $900	2	5.0	3.20	$386.85	$140.65	$125.50	$74.78	$35.83	$146.63	$909.63	1	$50.00	1	$272.00		−$111.00
$900 and under $1,200	14	3.4	2.73	454.98	179.90	139.68	81.32	54.84	417.38	1,328.10	4	60.63	10	349.77		− 232.51
$1,200 and under $1,500	42	4.3	3.07	487.82	208.72	[4] 160.15	[4] 83.86	83.82	294.52	1,321.21	28	117.77	12	121.89	2	+ 43.69
$1,500 and under $1,800	28	4.6	3.14	507.52	242.22	164.64	90.82	83.26	470.45	1,558.89	21	203.01	7	232.58		+ 94.11
$1,800 and under $2,100	11	4.5	3.35	592.66	285.61	165.47	99.60	107.43	392.75	1,643.53	11	305.16				+ 305.16
$2,100 and under $2,500	6	4.5	3.28	556.37	348.26	169.33	106.58	142.20	809.10	2,131.85	5	331.17	1	640.00		+ 169.31
$2,500 and over																
Total	103	4.3	3.09	501.94	228.93	[4] 158.99	[4] 88.32	84.72	396.63	1,460.41	70	183.80	31	241.95	2	+ 52.09

PER CENT.

Under $900	1.9			42.5	15.5	13.8	8.2	3.9	16.1	100.0	50.0		50.0			
$900 and under $1,200	13.6			34.3	13.5	10.5	6.1	4.1	31.4	100.0	28.6		71.4			
$1,200 and under $1,500	40.8			36.9	15.8	[4] 12.2	[4] 6.4	6.3	22.3	100.0	66.7		28.6		4.8	
$1,500 and under $1,800	27.2			32.6	15.5	10.6	5.8	5.3	30.2	100.0	75.0		25.0			
$1,800 and under $2,100	10.7			36.1	17.4	10.1	6.1	6.5	23.9	100.0	100.0					
$2,100 and under $2,500	5.8			26.1	16.3	7.9	5.0	6.7	38.0	100.0	83.3		16.7			
$2,500 and over																
Total	100.0			34.4	15.7	[4] 10.9	[4] 6.0	5.8	27.2	100.0	68.0		30.1		1.9	

[1] Not including 1 family in which rent is combined with fuel and light.
[2] Not including 3 families in which rent is combined with fuel and light.
[3] Not including 5 families in which rent is combined with fuel and light.
[4] Not including 2 families in which rent is combined with fuel and light.
[5] Not including 15 families in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Continued.

TRINIDAD, COLO.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	2	4.5	2.76	$376.78	$146.31	$126.00	$51.10	$37.28	$235.54	$972.99	.....	.....	2	$125.22	.....	−$125.22
$900 and under $1,200	9	5.1	2.99	478.72	187.27	143.32	72.69	36.56	201.04	1,119.60	5	$61.22	4	135.84	.....	− 26.36
$1,200 and under $1,500	25	4.3	2.98	498.55	208.25	[1] 177.56	[1] 70.59	65.77	257.05	1,275.99	20	110.67	5	143.14	.....	+ 59.91
$1,500 and under $1,800	21	5.1	3.70	579.08	278.21	191.95	75.80	72.42	367.93	1,565.40	12	199.95	9	121.54	.....	+ 62.17
$1,800 and under $2,100	6	5.2	2.86	607.67	264.68	[2] 211.50	[2] 88.74	94.40	459.58	1,733.54	5	224.09	1	205.38	.....	+ 152.51
$2,100 and under $2,500	11	5.5	3.75	739.84	431.41	208.09	81.29	153.24	475.73	2,089.60	8	324.04	3	169.01	.....	+ 189.57
$2,500 and over	4	6.3	4.76	928.76	411.88	194.00	95.89	144.55	669.35	2,444.42	3	386.21	1	320.00	.....	+ 209.66
Total	78	5.0	3.25	579.30	269.33	[3] 183.27	[3] 75.67	82.04	347.45	1,537.95	53	184.72	25	145.43	.....	+ 78.90
	PER CENT.															
Under $900	2.6	.....	.....	38.7	15.0	12.9	5.3	3.8	24.2	100.0	.....	.....	100.0	.....	.....	.....
$900 and under $1,200	11.5	.....	.....	42.8	16.7	12.8	6.5	3.3	18.0	100.0	55.6	.....	44.4	.....	.....	.....
$1,200 and under $1,500	32.1	.....	.....	39.1	16.3	[1] 13.9	[1] 5.5	5.2	20.1	100.0	80.0	.....	20.0	.....	.....	.....
$1,500 and under $1,800	26.9	.....	.....	37.0	17.8	12.3	4.8	4.6	23.5	100.0	57.1	.....	42.9	.....	.....	.....
$1,800 and under $2,100	7.7	.....	.....	35.1	15.3	[2] 12.0	[2] 5.0	5.4	26.5	100.0	83.3	.....	16.7	.....	.....	.....
$2,100 and under $2,500	14.1	.....	.....	35.4	20.6	10.0	3.9	7.3	22.8	100.0	72.7	.....	27.3	.....	.....	.....
$2,500 and over	5.1	.....	.....	38.0	16.8	7.9	3.9	5.9	27.4	100.0	75.0	.....	25.0	.....	.....	.....
Total	100.0	.....	.....	37.7	17.5	[3] 11.9	[3] 4.9	5.3	22.6	100.0	67.9	.....	32.1	.....	.....	.....

VIRGINIA, MINN.

Under $900	1	6.0	3.95	$420.64	$122.29	$84.00	$106.36	$27.68	$118.78	$879.75	1	$20.00	.....	.....	.....	+$20.00
$900 and under $1,200	1	5.0	2.19	280.24	153.04	150.00	57.42	52.68	250.50	943.88	1	40.52	.....	.....	.....	+ 40.52
$1,200 and under $1,500	18	4.6	3.14	503.76	241.18	168.21	83.37	76.66	214.48	1,287.67	14	116.90	4	$156.90	.....	+ 56.05
$1,500 and under $1,800	25	5.4	3.36	556.84	279.01	[1] 195.79	[1] 90.91	114.52	282.59	1,515.13	20	163.16	5	121.59	.....	+106.21
$1,800 and under $2,100	17	5.7	3.68	675.90	297.39	195.53	109.47	92.57	381.40	1,752.26	15	220.45	2	269.89	.....	+162.77
$2,100 and under $2,500	8	5.5	3.98	651.91	394.13	181.00	115.48	145.42	626.30	2,114.23	7	265.49	1	358.00	.....	+187.55
$2,500 and over	1	10.0	5.82	979.15	627.20	102.00	105.04	51.35	335.96	2,200.70	1	334.19	.....	.....	.....	+334.19
Total	71	5.4	3.48	582.74	287.71	[1] 183.36	[1] 96.23	100.17	325.70	1,574.41	59	177.28	12	177.77	.....	+117.27

PER CENT.

Under $900	1.4	.....	.....	47.8	13.9	9.5	12.1	3.1	13.5	100.0	100.0	.....	.....	.....	.....	.....
$900 and under $1,200	1.4	.....	.....	29.7	16.2	15.9	6.1	5.6	26.5	100.0	100.0	.....	.....	.....	.....	.....
$1,200 and under $1,500	25.4	.....	.....	39.1	18.7	13.1	6.5	6.0	16.7	100.0	77.8	.....	22.2	.....	.....	.....
$1,500 and under $1,800	35.2	.....	.....	36.8	18.4	[1] 12.9	[1] 6.0	7.6	18.7	100.0	80.0	.....	20.0	.....	.....	.....
$1,800 and under $2,100	23.9	.....	.....	38.6	17.0	11.2	6.2	5.3	21.8	100.0	88.2	.....	11.8	.....	.....	.....
$2,100 and under $2,500	11.3	.....	.....	30.8	18.6	8.6	5.5	6.9	29.6	100.0	87.5	.....	12.5	.....	.....	.....
$2,500 and over	1.4	.....	.....	44.5	28.5	4.6	4.8	2.3	15.3	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	37.0	18.3	[1] 11.6	[1] 6.1	6.4	20.7	100.0	83.1	.....	16.9	.....	.....	.....

WICHITA, KANS.

Under $900	1	5.0	3.20	$455.55	$117.45	$120.00	$63.30	$8.05	$133.16	$897.51	.....	.....	.....	.....	1	.....
$900 and under $1,200	11	4.1	3.00	464.59	158.98	146.61	44.05	74.44	254.80	1,143.48	3	$58.70	7	$147.48	1	−$77.84
$1,200 and under $1,500	29	4.9	3.06	494.16	214.12	203.31	63.36	78.41	265.55	1,318.91	17	136.02	11	175.40	1	+ 13.21
$1,500 and under $1,800	17	4.7	3.43	552.13	242.60	238.48	64.22	61.79	394.89	1,554.12	11	238.77	4	204.34	2	+106.42
$1,800 and under $2,100	12	4.9	3.14	590.77	270.14	257.85	84.74	112.89	432.62	1,749.01	8	295.57	3	187.70	1	+150.12
$2,100 and under $2,500	3	7.3	5.31	677.34	433.58	279.67	73.17	97.38	459.13	2,020.28	3	306.17	.....	.....	.....	+306.17
$2,500 and over	2	7.0	6.09	953.88	494.33	199.00	70.83	46.18	563.62	2,327.83	2	229.00	.....	.....	.....	+229.00
Total	75	4.9	3.32	537.49	236.42	213.52	64.74	78.54	333.95	1,464.65	44	201.27	25	173.69	6	+ 60.18

PER CENT.

Under $900	1.3	.....	.....	50.8	13.1	13.4	7.1	0.9	14.8	100.0	.....	.....	.....	.....	100.0	.....
$900 and under $1,200	14.7	.....	.....	40.6	13.9	12.8	3.9	6.5	22.3	100.0	27.3	.....	63.6	.....	9.1	.....
$1,200 and under $1,500	38.7	.....	.....	37.5	16.2	15.4	4.8	5.9	20.1	100.0	58.6	.....	37.9	.....	3.4	.....
$1,500 and under $1,800	22.7	.....	.....	35.5	15.6	15.3	4.1	4.0	25.4	100.0	64.7	.....	23.5	.....	11.8	.....
$1,800 and under $2,100	16.0	.....	.....	33.8	15.4	14.7	4.8	6.5	24.7	100.0	66.7	.....	25.0	.....	8.3	.....
$2,100 and under $2,500	4.0	.....	.....	33.5	21.5	13.8	3.6	4.8	22.7	100.0	100.0	.....	.....	.....	.....	.....
$2,500 and over	2.7	.....	.....	41.0	21.2	8.5	3.0	2.0	24.2	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	36.7	16.1	14.6	4.4	5.4	22.8	100.0	58.7	.....	33.3	.....	8.0	.....

[1] Not including 1 family in which rent is combined with fuel and light.
[2] Not including 2 families in which rent is combined with fuel and light.
[3] Not including 3 families in which rent is combined with fuel and light.

AVERAGE AMOUNT AND PER CENT OF EXPENDITURE PER ANNUM FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF FAMILIES IN SPECIFIED INDUSTRIAL CENTERS, BY CITIES AND BY INCOME GROUPS—Concluded.

WINSTON-SALEM, N. C.

Income group.	Number of families.	Average persons in family.		Average yearly expenses per family for—						Total average yearly expenses per family.	Surplus.		Deficit.		Families having neither surplus nor deficit.	Av. surplus (+) or deficit (−) for group.
		Total.	Equivalent adult males.	Food.	Clothing.	Rent.	Fuel and light.	Furniture and furnishings.	Miscellaneous.		Families having.	Average amount.	Families having.	Average amount.		
Under $900	2	4.5	2.32	$388.98	$78.89	$92.50	$53.60	$11.52	$105.15	$730.63	1	$5.46	.....	.....	1	+ $2.73
$900 and under $1,200	20	4.8	2.95	453.04	167.28	[1] 133.96	[1] 73.50	61.91	222.94	1,109.03	7	56.57	12	$129.30	1	− 57.78
$1,200 and under $1,500	20	5.7	3.53	502.76	189.30	159.53	73.91	87.88	240.35	1,253.73	17	94.50	2	133.00	1	+ 67.03
$1,500 and under $1,800	23	5.1	3.50	572.09	285.39	[1] 175.58	[1] 80.51	111.15	305.34	1,524.33	19	148.36	4	148.34	.....	+ 96.76
$1,800 and under $2,100	8	6.4	4.34	639.60	378.64	193.48	100.69	148.76	420.30	1,881.46	5	136.70	3	107.96	.....	+ 44.95
$2,100 and under $2,500	8	6.1	4.17	691.41	436.09	223.38	94.16	144.83	486.15	2,076.01	7	227.94	1	242.40	.....	+169.15
$2,500 and over	1	7.0	5.41	659.64	413.30	176.80	72.03	191.21	311.04	1,824.02	1	691.25	.....	.....	.....	+691.25
Total	82	5.4	3.51	540.97	253.47	[2] 166.19	[2] 79.80	98.97	290.43	1,430.00	57	136.79	22	135.33	3	+ 58.78
	PER CENT.															
Under $900	2.4	.....	.....	53.2	10.8	12.7	7.3	1.6	14.4	100.0	50.0	.....	.....	.....	50.0	.....
$900 and under $1,200	24.4	.....	.....	40.8	15.1	[1] 12.1	[1] 6.6	5.6	20.1	100.0	35.0	.....	60.0	.....	5.0	.....
$1,200 and under $1,500	24.4	.....	.....	40.1	15.1	12.7	5.9	7.0	19.2	100.0	85.0	.....	10.0	.....	5.0	.....
$1,500 and under $1,800	28.0	.....	.....	37.5	18.7	[1] 11.5	[1] 5.3	7.3	20.0	100.0	82.6	.....	17.4	.....	.....	.....
$1,800 and under $2,100	9.8	.....	.....	34.0	20.1	10.3	5.4	7.9	22.3	100.0	62.5	.....	37.5	.....	.....	.....
$2,100 and under $2,500	9.8	.....	.....	33.3	21.0	10.8	4.5	7.0	23.4	100.0	87.5	.....	12.5	.....	.....	.....
$2,500 and over	1.2	.....	.....	36.2	22.7	9.7	3.9	10.5	17.1	100.0	100.0	.....	.....	.....	.....	.....
Total	100.0	.....	.....	37.8	17.7	[2] 11.6	[2] 5.6	6.9	20.5	100.0	69.5	.....	26.8	.....	3.7	.....

[1] Not including 1 family in which rent is combined with fuel and light.

[2] Not including 2 families in which rent is combined with fuel and light.

Cost of Living for a Workingman's Family in Argentina.

THE National Labor Department at Buenos Aires, Argentina, has prepared a table showing the minimum monthly expenditure that is required for a workingman and his family consisting of wife and two small children, the prices being based on the average costs ruling in 1918. This table has been transmitted to this bureau through the State Department, under date of June 5, 1919. It is noted that the circumstances and needs of such families vary considerably, but the prices and expense list given are believed to apply in most respects to the circumstances of the great majority of married workingmen with the number of children mentioned. The report states that the figures are based on articles of food of inferior rather than first or second class quality.

MONTHLY COST OF LIVING OF A WORKINGMAN'S FAMILY IN ARGENTINA, 1918.

Item.	Expenditure.	Item.	Expenditure.
Market purchases	$12.74	Bedclothes and other sundry expenses	$1.27
Milk	2.12	Footwear	2.12
Groceries	10.62	Headgear	.42
Bread	4.25	Rent	9.34
Charcoal and wood	2.12	Incidentals	4.25
Man's clothing	2.12		
Woman's clothing	1.27	Total per month	53.91
Children's clothing	1.27		

The expenditures given in the table have been analyzed as follows:

Market purchases:	
Meat, 66 pounds	$7.64
Vegetables	5.10
Total	12.74
Groceries:	
Sugar, 11 pounds	1.36
Olive oil, 5.5 pounds	2.12
Coffee, 2.2 pounds	.51
Beans, 16.5 pounds	1.02
Fat, 2.2 pounds	.42
Kerosene, 1 tin	2.12
Soap, 4.4 pounds	.42
Vegetables, dried, 6.6 pounds	.64
Other requirements, such as salt, pepper, cheese, vinegar, matches, etc	2.00
Total	10.61

Man's clothing (per year):	
Undershirts, 2	1.70
Shirts, 2	1.70
Drawers, 2 pairs	1.70
Socks, 6 pairs	2.12
Ties, 2	.42
Collars, 4	.85
Suit, 1	16.98
Total	25.47
Average per month	2.12
Woman's clothing (per year):	
House dress, 1	1.27
Chemises, 2	2.55
Outdoor dresses, 2	6.37
Miscellaneous	5.10
Total	15.29
Average per month	1.27
Children's clothing (per year):	
Suits, 4	6.80
Hats, etc	8.49
Total	15.29
Average per month	1.27
General expenses:	
Car fares	1.70
Education	.85
Medicines and doctor's bills	.85
Miscellaneous	.85
Total	4.25

Rise in Cost of Living in New Zealand in 1918.

THE American consul general at Auckland, New Zealand, has transmitted through the State Department, under date of February 27, 1919, a table showing the wholesale prices of certain commodities at the end of 1918 as compared with the end of 1917. In this connection it is remarked that the increase in the cost of living is more pronounced when it is noted that the value of the pound sterling ($4.87) decreased from $3.55 in 1917 to $3.23 in 1918, so that 20s. ($4.87) would buy in 1918 no more than 13s. 3.5d. ($3.23) would buy in 1914, "which very greatly affected the workmen's budgets." The following is the table, the percentage of increase not being included in the original table:

WHOLESALE PRICES OF CERTAIN COMMODITIES IN NEW ZEALAND AT THE END OF 1918 AS COMPARED WITH THE END OF 1917.

Commodity.	Unit.	1917	1918	Per cent of increase.
Apples	60-pound case	$2.43	$6.08	150.2
Barley	Bushel	1.82	1.62	[1] 11.0
Corn	do	1.70	2.12	24.7
Corrugated sheet iron	Long ton	374.72	364.99	[1] 2.6
Fencing wire	do	218.99	301.72	37.8
Flour	do	81.16	81.51	.4
Linseed oil	Gallon	2.92	2.67	[1] 8.6
Linseed oil cake	Short ton	63.46	63.26	[1] .3
Oats	Bushel	1.13	1.62	43.4
Oatmeal	Long ton	116.80	170.32	45.8
Pig iron	do	68.33	77.86	13.9
Potatoes, white	do	34.06	51.09	50.0
Salt	do	72.98	73.00	([2])
Sugar	do	107.66	110.10	2.3

[1] Decrease. [2] Less than one-tenth of 1 per cent.

It should be stated that the 1918 price for apples was the price in November, which is the off season, and that the 1917–18 crop in general was poor. During the Christmas holidays apples retailed at 30 cents per pound; they were sold at wholesale for $2.19 per case at the end of February, 1919. The following table gives the average cost of food commodities in October and November, 1918, as compared with July, 1914, as published by the New Zealand Government. The percentages of increase do not appear in the original table.

AVERAGE COST OF FOOD COMMODITIES IN OCTOBER AND NOVEMBER, 1918, AS COMPARED WITH JULY, 1914.

Commodity.	Unit.	July, 1914.	October, 1918.	November, 1918.	Per cent of increase, November, 1918, over July, 1914.
Bread	7 2-lb. loaves.	$0.535	$0.755	$0.755	41.1
Flour	3 lbs.	.09	.14	.145	61.1
Oatmeal	lb.	.04	.09	.09	125.0
Rice	do	.045	.065	.065	44.4
Tea	½ lb.	.19	.235	.23	21.1
Cocoa	¼ lb.	.105	.135	.14	33.3
Sugar	3 lbs.	.12	.185	.185	54.2
Jam	2 lbs.	.23	.305	.31	34.8
Raisins	½ lb.	.055	.08	.08	45.5
Potatoes	14 lbs.	.20	.46	.52	160.0
Milk	7 pints	.295	.37	.37	25.4
Butter	3 lbs.	.87	1.195	1.195	37.4
Cheese	¼ lb.	.045	.065	.065	44.4
Bacon	lb.	.23	.35	.36	56.5
Sirloin beef	3 lbs.	.42	.545	.55	31.0
Stewing steak	2 lbs.	.235	.315	.315	34.0
Corned roll beef	lb.	.105	.155	.155	47.6
Beef sausages	2 lbs.	.185	.22	.22	18.9
Mutton legs	3 lbs.	.345	.50	.50	44.9
Mutton shoulder	2 lbs.	.19	.28	.275	44.7
Mutton chops	do	.26	.345	.345	32.7

Retail Food Prices in Christiania, Norway, in April, 1919.

EVIDENCE of the high prices for staple food commodities prevailing in Christiania, Norway, is presented in a brief report submitted by the United States trade commissioner at that place. The following list gives the prices for April 10, 1919. All quantities and prices have been converted to the American standards of weight and value to facilitate comparison with prices in the United States.

RETAIL PRICES OF STAPLE FOOD COMMODITIES IN CHRISTIANIA, NORWAY, APRIL 10, 1919.

Article.	Unit.	Price.	Article.	Unit.	Price.
Flour:			Miscellaneous—Concld.		
Wheat	Pound	$0.11	Sugar, granulated	Pound	$0.14
Rye	do	.10	Sugar, lump	do	.17
Barley	do	.06	Sirup, extra light	do	.17
Rolled oats (bulk)	do	.09	Sirup, light	do	.13
Meat:			Canned goods:		
Mutton, Iceland (front and ribs)	do	.38	Cherries	1 lb. 15 oz. pkg.	1.21
Mutton, Iceland (rear quarter)	do	.41	Cranberries	1 lb. 6 oz. pkg.	1.08
Pork	do	.56	Plums	1 lb. 14 oz. pkg.	1.00
Beef	do	.51	Peaches	do	.94
Horse meat	do	.30	Grapes	2 lb. 1 oz. pkg.	.94
Corned beef, American	6-pound can	3.22	Apples	do	.80
Corned beef (bulk)	Pound	.59	Apricots	1 lb. 4 oz. pkg.	.67
Sardines in oil	do	.15	Pears	do	.54
Miscellaneous:			Blackberries	10 oz. pkg	.46
Margarine (highest quality)	do	.39	Pineapple	do	.46
Cheese (goat and other high grades)	do	.57	Tomatoes	2 lb. 6 oz. pkg.	1.21
Royal Baking Powder	2-oz. package	.20	Green peas	1 lb. 4 oz. pkg.	.51
Do	4-oz. package	.35	Sauerkraut	do	.48
Starch	Pound	.40	Corn	do	.45
Condensed milk (unsweetened)	do	.24	Lima beans	do	.45
Condensed milk (sweetened)	do	.28	Pumpkin	2 lb. 1 oz. pkg.	.40
			Squash	do	.40
			Carrots	1 lb. 4 oz. pkg.	.27
			Dried fruits:		
			Prunes	Pound	.45
			Apricots	do	.56
			Raisins	do	.44
			Apples	do	.46

COOPERATION AND EMPLOYEES' REPRESENTATION.

Cooperation in Three Countries.

AT the National Conference of Social Work, held in Atlantic City, June 1–8, it had been the intention of the committee on industrial and economic problems to have five papers on cooperation presented, three dealing with the situation in the United States and two with phases of cooperation in England and Russia. Unfortunately, Dr. DuBois, who was to have spoken on cooperative industry among Negroes, and Mr. Dalton T. Clarke, president of the National Cooperative Wholesale, who was to have discussed cooperation in the United States, were unable to be present, and their papers were not read.

Mrs. Eleanor Barton, of the Woman's Cooperative Guild, England, before taking up her announced subject, "Women in the cooperative movement in England," spoke briefly on the remarkable growth of the cooperative movement in England. She stated that beginning with distributive cooperation, the benefits were found to be so pronounced that production was undertaken, along which line rapid advances are being made. The establishment of cooperative banks was a natural development from the big business of the cooperative wholesale societies, but it was hastened by a real dread of the growing concentration of capital into a few hands. Within the last two years there has been an amalgamation of banks in England, which, undertaken as a war measure, presents rather alarming possibilities because the control of credit is thus placed in the hands of a very small group. While this power may never be used for harm, the cooperators feel safer to make themselves reasonably independent of it.

The Woman's Cooperative Guild is an organization for applying cooperative methods to social and educational as well as to economic problems. Individually these cooperators are members of cooperative societies, but as guild members their activities relate to questions which concern the home and women—which, as Mrs. Barton pointed out, cover most fields of human enterprise. They have devoted much attention to education, their general attitude being that full training should be given every child, and that each child should have a right to choose any occupation for which it is suited, regardless

of whether this is generally looked upon as a boy's or a girl's pursuit. Hence they have fought the conventional program, by which for the first few years boys and girls are given the same training, after which the boys are given real manual and later vocational and technical training, while the girls are put into sewing and cooking classes regardless of their tastes or wishes. On the same principle the guild has demanded absolute sex equality in the cooperative movement, although complete success does not seem as yet to have been reached along this line. As members of the cooperative societies, the right of women to vote is fully admitted, but they have not yet secured fair representation on the boards of directors nor on the staffs of their cooperative papers. On this point progress was reported, and the guild looks forward confidently to full success. The guild stands for fair wages, and years ago established a minimum wage for all cooperative employees, which was higher than the minima later established by the various trade boards set up before the war.

A recent development has been the decision to take part in politics, and as a result of this the guild is seeking to work out a combination between the trade-unions and the cooperative societies. At present the plan is not to unite the two organizations, but simply to work together where they can help each other and especially to avoid hindering each other in political matters. For example, although the political programs of the two organizations differ somewhat, they do not propose to run opposing candidates, but to agree upon which one shall be represented in a given district, and to unite in supporting the nominee agreed upon.

Mrs. Barton emphasized the fact that the Woman's Cooperative Guild values cooperation as much for its social and international as for its economic effects. Through nation-wide cooperation it is hoped to put an end to the competitive system which is responsible for sweated industry and most other ills of our present industrial order, and through international cooperation it is hoped to do away with the economic rivalries which are the underlying causes of most modern wars.

Cooperation in the United States.

Mr. James P. Warbasse, president of the Cooperative League of America, spoke briefly on the progress of cooperation in the United States. This has been very marked within the last two or three years. Usually the first step has been the formation of a retail distributive society, which, as it succeeds, becomes interested in what other societies of the same kind are doing, and a federation of retail societies is likely to result. Then the demand for goods naturally leads to the formation of a wholesale cooperative society, which in

its turn is likely to federate with others, and to join in a demand for cooperative production. Cooperative credit agencies generally come last. This order is by no means invariable. Local circumstances may lead to the starting of a cooperative creamery or shingle mill or laundry or other enterprise, from which the cooperators work on to the other forms and to the federations. So far, the practice in the United States has been for cooperative enterprises to return to their members in the form of a dividend the profits made; in Europe these profits, or some part of them, are often retained and used for some enterprise promoting the general good.

Reference was made to the rapid growth of the cooperative movement in the United States, which growth makes it difficult to keep the data concerning it up to date. A few months ago, there were known to be about 2,000 cooperative societies of one kind or another; the latest reports show nearly 3,000. They are scattered throughout the Union, and many of them are united in State or interstate federations. There is a strong group in the Northwest, and another in Illinois, while others are scattered through the central and eastern States. Different racial groups have their own cooperatives, featuring special lines of work. One interesting example is an attempt by Finnish cooperators of New York City to cope with the housing problem. They have bought ground and put up houses in which apartments may be secured by members of the society for from $22 to $27 a month which normally in New York would rent at from $35 to $60.

The Cooperative League of America is an organization for unifying the cooperative societies, and providing a center for common activities. Its first convention was held last September.

The cooperative movement is reaching out beyond national to international cooperation. There is already an international alliance composed of 24 national bodies. Its last conference was held at Glasgow in 1913. During the war this international body has maintained its being, refusing to be severed by the hostilities which tore asunder most other bodies. It has not been possible to hold conferences, but its monthly bulletin has been issued regularly, and what is far more, has been distributed, the censor allowing it to pass freely. Now that the war is over, the Russian and English cooperatives are working out plans of international trade, and they cherish visions of cooperatively owned vessels carrying the cooperatively produced raw materials of Russia to England and returning laden with the cooperatively manufactured English products which Russia needs.

Cooperation in Russia.

Mr. A. J. Zelenko, managing director of the American committee of the Russian Cooperative Unions, dwelt on the effectiveness of the Russian cooperative movement as a means for realizing social ideals. The individual, he pointed out, must necessarily be concerned chiefly with the present; the State is necessarily hampered by the past, since it inherits the burden of former mistakes, which its energy must be directed to rectifying. But financial interests are concerned with the future, and the cooperative movement, dealing largely with finance, shares this forward looking attitude. Again, the realization of any social ideal involves the use of money, which, in the United States, must be secured either from the public-spirited individual or from the State. In Russia securing the money gives no concern, because the people already have it in the form of cooperative funds.

There are three kinds of cooperative societies in Russia. First, there are consumers' unions of the kind we are familiar with in this country, which conduct stores, distributing the profits among the members at the end of each year. Always, however, some part of the profits is set aside, either for reserve capital, or for the furtherance of some social enterprise the society wishes to undertake. Such cooperative societies have 12,000,000 members, and as only heads of families are allowed to become members, they probably represent a population of 60,000,000. Next come the credit societies, which conduct banks for the savings of the poor, loaning their funds to the consumers' societies when the latter wish credit. These societies have about 4,000,000 members. Third, there are the producers' unions, in which the producers are organized to market their products, and these have about 4,000,000 members. It is estimated that about two-thirds of the Russian population is represented in these various societies.

The cooperative societies of Russia are a tremendous social as well as economic force. Beginning with one society in 1865, by 1917 Russia had nearly 40,000 societies of varying strength. Production, distribution, credit, transportation, education, amusement—there is hardly a feature of industrial or social life with which they are not busied. Each local society is composed of shareholders, heads of families, who pay an initial fee, and assume responsibility for an amount considerably larger.

By way of showing the extent to which these societies entered into the everyday life of the people, Mr. Zelenko spoke of a trip he had made in Siberia a year ago. Arriving hot and dusty at a small town a hundred miles from the nearest railroad station, he was taken to the cooperative store to get something to drink. (In paren-

thesis he explained that the cooperative societies never sell or handle alcoholic drinks.) The store was well stocked with goods received from cooperative societies scattered over Russia, from the Black Sea to the Arctic Ocean and from the Prussian border to Vladivostok. From the store they adjourned to a cooperative tea house, where there were rooms for reading, games, etc., as well as for social discussion while drinking tea. Later, they went to a cooperative theater, where some new films he had brought with him from the cooperative film producing companies were displayed, the light being furnished by the cooperative electrical company of the village. The residents were greatly exercised because some books ordered from the cooperative printing presses in Moscow had not been received, and Mr. Zelenko was compelled to admit that the war between the different Russian parties had interfered sadly with transportation from Moscow; however, he called their attention to the fact that they were still receiving regularly their cooperative papers, and expressed the hope of the cooperatives as a whole that normal conditions might soon be restored.

The cooperative societies in Russia hold themselves strictly aloof from politics, and have carried on their activities with remarkably little interruption, all things considered, from the war. In 1918, in spite of the hindrances connected with the blockade and the disturbed state of the country generally, their total turnover was 8,000,000,000 rubles, or about $1,600,000,000. In that year they operated over 500 industrial plants, and had a total of over 50,000 employees. The importance of the cooperative societies as a means of restoring normal conditions in Russia, and of reestablishing trade relations with the outside world, can hardly be overestimated.

Application of Industrial Council Plan to Administrative Departments of British Government.

A DRAFT scheme for the application of the Whitley industrial council plan to all departments of the British Government having industrial establishments was approved by the War Cabinet, and a brief summary of its provisions was given in the MONTHLY LABOR REVIEW for May, 1919 (pp. 114–116). A similar scheme was drafted by a subcommittee of the interdepartmental committee to which the matter was referred, by which the Whitley proposals are to be applied also to the administrative departments of the civil service. The report[1] of this subcommittee, dated March 7, 1919, was also

[1] Subcommittee of the interdepartmental committee on the application of the Whitley report to Government establishments. Report. London. 1919. Cmd. 9. Price, 2d net.

approved by the War Cabinet, and was considered on April 8 at a conference of representatives of associations covering practically the whole of the administrative, clerical, manipulative, and manual civil services and officials of the Government departments concerned. A resolution was adopted at this conference accepting that portion of the report (in par. 45) which proposes to set up a national joint committee to consider a Whitley scheme for the clerical and administrative branches of the civil service, and remitting the whole report (and any other reports dealing with the matter) to such joint committee, which, it was stipulated, should consist of 30 members representing in equal numbers the Government departments and the civil service associations. This committee was subsequently appointed.

The report of the subcommittee to which reference is here made points out the differences between private and public employment which "must necessarily modify the application to Government departments of proposals intended and designed for private industry."

These differences are—

1. The fact that the State is the ultimate employer of Government servants through the heads of departments, who consequently have not the freedom of decision in regard to wages and conditions enjoyed by the private employer.

2. The absence of the check imposed by considerations of profit and losses and its replacement by Treasury control which, so far as questions of remuneration are concerned, is now subject to an appeal to the conciliation and arbitration board for Government employees.

3. The fact that an employee in a Government office is not merely a private individual in public employment but is in a very real sense a servant of the public and as such has assumed obligations which, to some extent, necessarily limit his ordinary rights as a private citizen.

Emphasis is laid on the fact that since public departments should be administered for the benefit of the public, the minister in charge being responsible to Parliament for its being so administered, "the control of the minister must remain unimpaired" and "he must continue as in the past to exercise his powers unfettered by any restrictions other than those incidental to ultimate parliamentary control." For this reason the committee suggests that joint bodies for the administrative departments should be consultative and should have no executive powers.

Conclusions and Recommendations of the Committee.

The following summary of the conclusions and recommendations of the subcommittee are quoted from the report:

1. The main objects of establishing joint bodies for the administrative departments are to secure greater cooperation between the State, as employer, and the general body of civil servants so as to promote increased efficiency in the public service and the well-being of those employed, to provide machinery for the ventilation of grievances,

and to enable all grades and classes to contribute their views and experience on many technical and difficult problems.

2. In view of the essential differences between public and private employment and the need for maintaining ministerial responsibility and parliamentary control, the joint bodies must be consultative and must not be invested with any executive functions.

3. The scheme must be sufficiently elastic to embrace the various kinds of departments and to cover all grades and classes of civil servants engaged on administrative, clerical, routine and manipulative duties, but it is not necessary to follow the precedent of industrial councils and to set up one set of bodies, organized on a trade basis, to deal with questions of collective bargaining and another set of bodies, organized on an industrial basis, to deal with other questions.

4. As the Treasury will be brought into close touch with the actual views and outlook of representative employees, and will be in a position to contribute valuable experience and knowledge of civil service conditions and practices, it is desirable that Treasury representation should be secured on the more important joint bodies.

5. Subject to certain modifications rendered necessary by the considerations indicated in (3) above, we recommend the adoption for the civil service of the recommendations of the Whitley report and the establishment of the following kinds of joint bodies:

(*a*) A national council for the whole of the administrative departments.
(*b*) One or more departmental joint committees for each department.
(*c*) District or local office joint committees in suitable cases.
(*d*) Sectional committees of the departmental committee.

6. The membership of each side of a joint body need not be equal, and the authorities nominating the respective sides of the joint bodies may vary some of their representatives according to the subject matters under discussion. As a rule associations should be represented by civil servants, but there is no objection to an association restricted to civil servants being represented by an official who is not a civil servant. The joint bodies should have written constitutions and careful attention should be paid to the nature of the publicity given to their proceedings. Only statements issued under the authority of a joint body should be published, but these should be as full and informative as possible. The expenses of joint bodies should be defrayed in the manner indicated * * *.

7. The aggregate membership of the national council should not exceed 50; the official representatives should be chosen by Government, a substantial majority being permanent heads of departments, or officials of high rank nominated by them; the Treasury and the Ministry of Labor should have permanent representation on this council; the staff representatives should be nominated by staff associations or groups of associations, every effort being made to secure that the staff side is broadly representative of the civil service as a whole.

8. The national council will be a consultative and advisory body and will be concerned with broad and important questions affecting the civil service as a whole, such as organization, recruitment, conditions of service, etc. Questions of remuneration affecting a class common to the service will only be discussed at this council, and will be referred to subcommittees consisting of members of the class concerned and selected members of the employer's side of the council nominated by the Treasury. In paragraph 27 we suggest a basis for the constitution of the national council founded on the recommendations contained in paragraph 16 of the Whitley report.

9. The employer's side of departmental committees will be appointed by the minister or head of the department from among the higher departmental officials; the staff representatives should be nominated by staff associations, care being taken to cover the whole field, and the distribution of places should be settled by nego-

tiation and should not merely depend on the membership strength of the associations concerned.

10. The departmental committee will be mainly concerned with matters affecting the department in which it is formed, and in all cases it will submit any conclusions reached to the head of the department for consideration. It may be desirable, particularly in the larger departments, to set up separate committees to discuss the pay and special conditions of service of the higher grades of supervising and controlling officers.

11. In the larger departments there may be branches, separate and distinct from the rest of the department in function, organization and personnel and in which the staff is represented by different associations. In such cases it may be convenient to set up separate departmental, district, and office committees.

12. District or local office joint committees may have to be formed in the case of departments whose work is distributed throughout the country, and distinct sections of departments staffed by grades recruited for and peculiar to those sections may call for sectional committees of the departmental committees.

13. Broad questions of administration and policy should be wholly excluded from the purview of civil service joint bodies and only the general aspects of questions of promotion, superannuation, and discipline should be considered, discussion or criticism of individual cases being excluded.

In paragraph 8 of the recommendations of the subcommittee reference is made to paragraph 27 of the report. This paragraph contains the following sketch of the functions of the national council:

1. Provision of the best means for utilizing the ideas and experience of the staff.

2. Means for securing to the staff a greater share in and responsibility for the determination and observance of the conditions under which their duties are carried out.

3. Consideration of the general principles governing conditions of service, e. g., recruitment, hours, promotion, salary, and superannuation.

4. The encouragement of further education of civil servants and their training in higher administration and business organization.

5. Improvement of office machinery and organization and the provision of opportunities for the full consideration of suggestions by the staff on this subject.

6. Proposed legislation so far as it has a bearing upon the position of the civil service.

Collective Agreements in Sweden.

THE widespread extent of collective agreements in Sweden and the familiarity therewith of workers and employers working thereunder is clearly brought out in a recent report by the labor office of that country.[1]

At the beginning of the year 1918 there were 265,517 workers under collective agreements. During the year 1917 there had been concluded 518 agreements covering 78,057 workers. Most of the agreements, 508 as against 10, were concluded between employers and organized workers. The majority of the agreements, i. e., 314, affecting 35,874 workers, were between workers and individual employers. There were four national agreements, affecting 29,211 employees.

[1] Sweden. Socialstyrelsen. Kollektivavtal i Sverige År 1917. Stockholm, 1919. vi, 46 pp. (Sveriges Officiella Statistik, Socialstatistik.)

Time rates of wages were applicable to 10,214 workers and piece rates or time rates and piece rates combined covered the remaining 67,843 workers. Agreements affecting 66,674 workers prescribed the hours of labor. The hours fixed were as follows:

WEEKLY HOURS OF LABOR FIXED BY COLLECTIVE AGREEMENTS AFFECTING 66,674 WORKERS.

Hours per week.	Workers affected.	
	Number.	Per cent.
48 hours and less	713	1.1
49 to 53 hours	3,255	4.8
54 hours	1,632	2.6
55 to 56 hours	6,709	10.0
57 hours	44,269	66.4
58 hours	966	1.4
59 hours	4,272	6.5
60 hours	2,931	4.4
Over 60 hours	1,927	2.8
Total	66,674	100.0

In 344 agreements affecting 57,745 employees, provisions were included relative to insurance against accident. A smaller number of agreements and a smaller number of workers were affected by provisions for sickness relief, namely, 243 agreements covering 55,413 workers.

The various agreements concluded between employers and workers in 1917 were distributed among the different industries as follows:

NUMBER OF COLLECTIVE AGREEMENTS AND OF PERSONS AFFECTED, IN 1917, BY INDUSTRY GROUPS.

Industry groups.	Number of agreements.	Persons affected.	
		Employers.	Workers.
Metal and machine trades	71	269	32,922
Stone and clay industries	18	32	2,022
Lumber and sawmilling	106	344	13,658
Paper industry	32	57	5,978
Food products	50	194	2,362
Textile and clothing	41	201	3,328
Hair, hides, and rubber	28	487	1,748
Chemical industry	19	19	3,621
Construction	62	270	3,275
Electric power, etc	27	29	3,145
Commerce and storage	25	63	789
Transportation (rail and ship)	28	201	4,271
Agriculture	2	8	275
Not specified	9	302	603
Total	518	2,566	78,057

State-Aided Cooperative Societies in South Africa.

THE following statement obtained from the Land and Agricultural Bank of South Africa, at Pretoria, by a United States trade commissioner and forwarded to this bureau by the Department of Commerce, indicates the number of cooperative societies in the Union of South Africa, the membership of these societies, and the extent to which that bank has granted loans. The statement gives the figures as of January 1, 1914, and December 31, 1918, for the Transvaal and Orange Free State; as of January 1, 1917, and December 31, 1918, for Natal; and as of December 31, 1918, only, for Cape Colony. It is explained that not until 1916 was the bank empowered to assist cooperative societies with unlimited liabilities in the Natal and Cape Provinces, and that prior to the formation of the Union, the Natal Government did not assist agricultural cooperation, while in the Cape Colony a general cooperative movement was embarked upon in 1905. Under the act of 1905, it is stated, loans not to exceed £150,000 ($729,975) were authorized. The report adds that "the hopes entertained of these various cooperative societies have on the whole been disappointed." The following are the figures supplied by the bank:

STATEMENT OF LOANS GRANTED COOPERATIVE SOCIETIES AT SPECIFIED DATES BY LAND AND AGRICULTURAL BANK OF SOUTH AFRICA.

Item.	Transvaal.		Orange Free State.		Natal.		Cape Colony, Dec. 31, 1918.
	Jan. 1, 1914.	Dec. 31, 1918.	Jan. 1, 1914.	Dec. 31, 1918.	Jan. 1, 1917.	Dec. 31, 1918.	
Number of societies..	15	16	1	15	2	7	1
Total membership...	6,720	8,434	359	1,246	40	124	17
Loans granted.....	$1,340,720.75	$2,319,373.90	$97,330.00	$1,015,151.90	$38,932.00	$118,255.95	$12,166.25
Amount owing in respect of loans (including interest)...	1,238,621.58	1,668,654.72	97,330.00	580,510.19	20,230.04	79,703.54	12,205.18

VOCATIONAL EDUCATION.

Enrollment in Vocational Courses Under Federal Vocational Education Act, 1917–18.

THE Vocational Summary, published by the Federal Board for Vocational Education, contains in the May, 1919, issue a report of the total enrollment in vocational courses for the fiscal year ending June 30, 1918, which is the first year of the operation of the Federal Vocational Education Act. This report is accompanied by several diagrams showing the enrollments, by States, in vocational agricultural courses per 100,000 of rural population in 1910, and in home economic and vocational trade or industrial courses per 100,000 urban population in 1910. Two other diagrams show, respectively, the number of students reported enrolled in vocational courses by sex and by type of course, and the regional distribution of these enrollments. It appears from this report that per 100,000 rural population Utah reported the largest enrollment (352) of pupils in agricultural courses, Massachusetts the second largest (210), and Connecticut the third largest (188); and that Michigan reported the largest actual enrollment of pupils in agricultural courses (1,874), and an enrollment per 100,000 rural population of 112.

It further appears that per 100,000 urban population, Arizona reported the largest enrollment in home economics courses (341), but it is explained that as Arizona's total urban population in 1910 was less than 100,000, the actual enrollment in home economics courses (216) was considerably less than the proportional number per 100,000. Vermont, also with a small enrollment of pupils in home economics courses (446), reported a large enrollment per 100,000 urban population (264). New Jersey's enrollment of 3,680 home economics pupils gives the third largest enrollment in such courses per 100,000 urban population (245). Massachusetts reported the largest actual enrollment of home economics pupils (7,589) and the fourth largest enrollment per 100,000 urban population (243).

The report shows that there were much larger enrollments, actual and proportional, in trade or industrial courses than in agricultural or home economics courses. Nevada's large enrollment in trade and industrial courses per 100,000 urban population (1,788) relates to a very small urban population (13,367), the actual enrollment in such

courses being only 239. Pennsylvania reported 50,107 pupils and an enrollment per 100,000 urban population of 1,082. Connecticut reported 5,934 pupils and an enrollment per 100,000 of 593.

Referring to sex classification, the report states that for agricultural and trade or industrial all-day and evening courses, enrollments generally were predominantly male; and that for home economics only 29 males were reported in a total of 30,693 pupils. Of the 53,005 pupils enrolled in part-time courses 32,605 were male and 20,400 were female.

The following table shows the number and distribution of enrollments by courses:

NUMBER ENROLLED IN VOCATIONAL COURSES IN EACH GEOGRAPHICAL DIVISION, BY TYPE OF COURSE.

Type of course.	North Atlantic.	South Atlantic.	East Central.	West Central.	Pacific.	Total.
Agricultural	3,649	4,648	4,681	1,187	1,288	15,453
Trade and industrial	81,911	2,802	24,911	2,568	5,739	117,931
Home economics	19,456	2,023	7,553	914	853	30,799
Teacher training	1,014	1,597	2,082	1,316	580	6,589
Total	106,030	11,070	39,227	5,985	8,460	170,772

Plan of Cooperation Between Federal Board for Vocational Education and Navy Yards.[1]

A PLAN has been developed by the Federal Board for Vocational Education, with the cooperation of the commandant of the navy yard and the commanding officer of the naval hospital at Norfolk, Va., for the establishment of a curative workshop and subsequent vocational apprenticeship system which may be used as a standard for all navy yards. Certain features of the plan may be modified to meet special conditions at any particular station, but commandants of navy yards are urged, as far as possible, to follow this plan in its provisions for the treatment and training of disabled sailors and marines.

The general features of the plan, as outlined by the board, are as follows:

Ambulant, convalescent patients may be given therapeutic training through appropriate operations and exercises in the shops of the navy yard, but under conditions which duplicate actual productive shop conditions. A surgeon from the medical staff of the hospital has been placed in charge of the therapeutic work, and one ward of the hospital has been set aside for patients who desire such training. The Federal board's representative advises with the men and with the surgeon in charge. These two men decide upon appropriate work; that is to say, the surgeon writes a prescription, the vocational adviser decides upon the appropriate exercises, which are then

[1] Data taken from Vocational Summary for May, 1919, Federal Board for Vocational Education, Washington.

approved by the surgeon. In the office of the yard is another representative of the board, a coordinator, who receives the prescription and arranges for training under a competent mechanic who has also been trained as an instructor by the Federal board. During this period of therapeutic training the men are under the continuous observation of the surgeon in charge of this work. Arrangements have been concluded to the satisfaction of the naval authorities whereby men having completed their period of hospital training and therapeutic training may continue to receive vocational training in a wide variety of navy yard occupations. Neither in the therapeutic phase nor in the vocational phase is it assumed that men will necessarily eventually become employees of the navy yard.

The work is carried on at the expense of the Federal board, with the cooperation of the navy yard authorities. Mechanics in those trades which seem suitable for disabled men are specially trained by the board to act as instructors. With the approval of the navy yard officials these instructors may be taken from their usual employment in the yard as the need for instruction demands, returning to productive work in the shops when there is no longer the necessity for instruction to be given.

The advantages of the plan are summarized in this way:

(*a*) The primary aim is training adapted to the therapeutic needs of individuals. Production is a secondary aim.

(*b*) Its flexibility permits any and all kinds of work which the man should have to fit his particular case.

(*c*) It throws no additional burden of work, management, or organization upon the navy yard officials.

(*d*) It does not add to the navy yard expense or pay roll.

(*e*) It has the approval and hearty cooperation of representatives of the navy yard officials and representatives of the employees' organizations.

(*f*) Its purpose, organization, and methods of operation are such that no surplus of navy yard workmen will be created.

(*g*) It requires no modification of existing civil-service regulations.

EMPLOYMENT AND UNEMPLOYMENT.

Employment Conditions in the United States March 8 to June 21, 1919.

IN the March number of the LABOR REVIEW summaries were given showing the fluctuations in employment in important cities throughout the country over approximately a three-month period. These tables were compiled from weekly telegraphic reports, the information for which is secured by the United States Employment Service of the Department of Labor and published by the Industrial Conditions Section of the War Trade Board. The same source has been used in the following table showing employment conditions in certain selected cities over a period of practically four months.

During the three-month period previously noted the number of cities reporting was approximately the same, making possible a comparison of the relative shortage or surplus in the labor market. Following the closing of many of the employment offices early in March, however, the number of cities reporting on employment conditions fell, on March 15, from 122 to 66. This number was further reduced on April 12 to 58, but the Employment Service has been able to make arrangements for obtaining returns, so that since that time there has been a steady increase in the number of cities reporting. Because of the variation, therefore, in the number of cities from which reports were received the table showing the conditions of employment in important cities in the United States is omitted.

The table following shows the changes in labor conditions in certain selected cities, chosen because they are large industrial centers and therefore can be assumed to reflect fairly accurately conditions throughout the country. While the amount of unemployment increased for short periods in several cases, in nearly every instance there has been a fairly decided general decline in the oversupply of labor.

SELECTED CITIES REPORTING LABOR SURPLUS OR SHORTAGE EACH WEEK, MAR. 8 TO JUNE 21, 1919.[1]

Week ending—	New England.		Middle Atlantic.		South Atlantic.		East Central.		West Central.		Mountain.	Pacific.	
	Boston.	New Haven.	Rochester.	Pittsburgh.	Columbia.	Richmond.	Youngstown.	Cleveland.	Kansas City, Kans.	Minneapolis.	Butte.	San Francisco.	Seattle.
Mar. 8:													
Surplus	5,585	8,000	5,000	19,000	.....	1,500	4,900	60,000	2,200	7,000	12,000	8,200	9,000
Shortage	.....	.....	.....	[2] 1,700	[3]	.....	.....	.....	.....	.....	.....	.....	.....
Mar. 15:													
Surplus	5,685	8,000	5,000	19,000	.....	1,500	9,000	60,000	2,200	7,500	10,000	12,300	10,600
Shortage	.....	.....	.....	[2] 1,500	[3]	.....	.....	.....	.....	.....	.....	.....	.....
Mar. 22:													
Surplus	5,385	8,000	4,800	17,000	.....	1,500	9,000	60,000	2,200	7,500	10,000	12,300	10,000
Shortage	.....	.....	.....	[2] 1,000	1,500	.....	.....	.....	.....	.....	.....	.....	.....
Mar. 29:													
Surplus	[4]	8,000	4,500	[4]	.....	1,200	9,000	[4]	2,500	[4]	8,000	12,300	[4]
Shortage	[4]	.....	.....	[4]	1,650	.....	.....	[4]	.....	[4]	.....	.....	[4]
Apr. 5:													
Surplus	[4]	8,000	5,000	[4]	.....	[4]	12,000	[4]	2,400	[4]	8,000	12,300	7,000
Shortage	[4]	.....	.....	[4]	1,800	[4]	.....	[4]	.....	[4]	.....	.....	[5] 700
Apr. 12:													
Surplus	[4]	8,000	3,500	[4]	.....	[4]	12,000	[4]	2,400	[4]	4,000	6,000	[3]
Shortage	[4]	.....	.....	[4]	1,800	[4]	.....	[4]	.....	[4]	.....	.....	[3]
Apr. 19:													
Surplus	[4]	8,000	3,500	[4]	.....	[4]	[4]	[4]	2,500	[4]	[4]	4,500	[3]
Shortage	[4]	.....	.....	[4]	1,800	[4]	[4]	[4]	.....	[4]	[4]	.....	[3]
Apr. 26:													
Surplus	[4]	6,000	3,500	[4]	.....	[4]	13,000	[4]	2,200	5,000	[4]	4,000	[3]
Shortage	[4]	.....	.....	[4]	1,200	[4]	.....	[4]	.....	.....	[4]	.....	.....
May 3:													
Surplus	[4]	4,000	3,000	[4]	.....	[4]	12,500	[4]	1,900	3,000	[4]	3,500	2,000
Shortage	[4]	.....	.....	[4]	1,000	[4]	.....	[4]	.....	.....	[4]	.....	.....
May 10:													
Surplus	[4]	4,000	3,000	20,000	.....	1,200	16,000	30,000	1,600	[4]	[4]	3,000	[4]
Shortage	[4]	.....	.....	.....	1,000	.....	.....	.....	.....	[4]	[4]	.....	[4]
May 17:													
Surplus	[4]	4,000	3,000	20,000	.....	1,200	16,000	30,000	1,500	[4]	[4]	2,000	[4]
Shortage	[4]	.....	.....	.....	1,000	.....	.....	.....	.....	[4]	[4]	.....	[4]
May 24:													
Surplus	5,000	4,000	3,000	[4]	.....	1,000	10,000	30,000	1,500	[4]	[4]	1,800	[4]
Shortage	.....	.....	.....	[4]	1,000	.....	.....	.....	.....	[4]	[4]	.....	[4]
May 31:													
Surplus	8,500	2,500	3,000	19,000	.....	1,250	9,000	[4]	[4]	[4]	[4]	1,000	1,250
Shortage	.....	.....	.....	.....	800	.....	.....	[4]	[4]	[4]	[4]	.....	.....
June 7:													
Surplus	9,000	2,000	2,800	17,500	.....	1,300	6,000	[4]	[4]	[4]	[4]	1,000	2,000
Shortage	.....	.....	.....	.....	1,000	.....	.....	[4]	[4]	[4]	[4]	.....	.....
June 14:													
Surplus	12,000	2,000	2,000	15,000	.....	1,000	4,000	[4]	[4]	[4]	[4]	1,000	1,000
Shortage	.....	.....	.....	.....	1,000	.....	.....	[4]	[4]	[4]	[4]	.....	.....
June 21:													
Surplus	15,000	[4]	1,500	[4]	.....	1,000	3,000	[4]	[4]	[4]	[4]	500	[4]
Shortage	.....	[4]	.....	[4]	1,000	.....	.....	[4]	[4]	[4]	[4]	.....	[4]

[1] Owing to the closing in March of employment offices in many locations a number of cities did not report during the readjustment period.
[2] Miners.
[3] No estimate.
[4] Not reported.
[5] Farm laborers.

Employment in Selected Industries in May, 1919.

THE Bureau of Labor Statistics received and tabulated reports concerning the volume of employment in May, 1919, from representative manufacturing establishments in 13 industries. The figures for May of this year, when compared with those from identical establishments for May, 1918, show increases in the number of people employed in 4 industries and decreases in 9. Automobile manufacturing shows the largest increase, 15.8 per cent. Iron and steel, woolen, and men's ready-made clothing show percentage decreases of 18.3, 17.7, and 15.5, respectively.

Six of the industries show an increase in the total amount of the pay roll for May, 1919, as compared with May, 1918. The largest increase, 31.4 per cent, appears in automobile manufacturing, while silk shows an increase of 23.7 per cent. Decreases of 17.4 and 12.8 per cent are shown in iron and steel and woolen, respectively.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MAY, 1918, AND MAY, 1919.

Industry.	Establishments reporting for May, both years.	Period of pay roll.	Number on pay roll in May—		Per cent of increase (+) or decrease (−).	Amount of pay roll in May—		Per cent of increase (+) or decrease (−).
			1918	1919		1918	1919	
Automobile manufacturing	42	1 week	92,136	106,725	+15.8	$2,433,548	$3,197,207	+31.4
Boots and shoes	68	do	55,222	53,925	− 2.3	961,501	1,102,654	+14.7
Car building and repairing	42	½ month	50,669	44,023	−13.1	2,419,980	2,402,469	− .7
Cigar manufacturing	56	1 week	17,492	16,912	− 3.3	237,835	274,713	+15.5
Men's ready-made clothing	31	do	23,207	19,617	−15.5	445,637	436,684	− 2.0
Cotton finishing	16	do	14,019	12,816	− 8.6	251,344	248,545	− 1.1
Cotton manufacturing	51	do	46,306	47,607	+ 2.8	674,735	745,108	+10.4
Hosiery and underwear	56	do	29,895	25,870	−13.5	413,683	383,465	− 7.3
Iron and steel	114	½ month	215,376	175,970	−18.3	12,851,528	10,614,879	−17.4
Leather manufacturing	32	1 week	13,783	14,311	+ 3.8	276,229	320,681	+16.1
Paper making	51	do	28,093	24,603	−12.4	530,531	505,016	− 4.8
Silk	37	2 weeks	16,433	16,877	+ 2.7	495,920	613,227	+23.7
Woolen	50	1 week	46,880	38,574	−17.7	849,219	740,528	−12.8

The following table shows the number of persons actually working on the last full day of the reported pay period in May, 1918, and May, 1919. The number of establishments reporting on this question is small, and this fact should be taken into consideration when studying these figures.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON THE LAST FULL DAY'S OPERATION IN MAY, 1918, AND MAY, 1919.

Industry.	Establishments reporting for May, both years.	Period of pay roll.	Number actually working on last full day of reported pay period in May—		Per cent of increase (+) or decrease (−).
			1918	1919	
Automobile manufacturing	24	1 week	59,978	78,718	+31.2
Boots and shoes	21	do	12,068	10,340	−14.3
Car building and repairing	39	½ month	43,469	38,493	−11.4
Cigar manufacturing	17	1 week	3,457	3,952	+14.3
Men's ready-made clothing	6	do	10,577	9,802	− 7.3
Cotton finishing	11	do	9,144	8,773	− 4.1
Cotton manufacturing	33	do	21,611	22,198	+ 2.7
Hosiery and underwear	19	do	12,305	11,360	− 7.7
Iron and steel	92	½ month	173,022	135,628	−21.6
Leather manufacturing	17	1 week	9,927	10,355	+ 4.3
Paper making	15	do	9,398	7,571	−19.4
Silk	22	2 weeks	12,039	12,635	+ 5.0
Woolen	41	1 week	39,325	31,563	−19.7

In comparing the reports of the same industries for May, 1919, with those for April, 1919, 9 show an increase in the number of persons on the pay roll and 4 a decrease. The largest increases, 12.7 and 12.2 per cent, are shown in woolen and cotton manufacturing, respectively, while the largest decreases, 5.8 and 4.6 per cent, appear in paper making and iron and steel.

Ten of the 13 industries reporting show increases and 3 decreases in the total amount of the pay roll in May, 1919, when compared with April, 1919. The largest increases are 18.3 per cent in cotton manufacturing; 16.5 per cent in woolen; and 14.6 per cent in cotton finishing. Iron and steel and paper making show percentage decreases of 8.4 and 5.5, respectively.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN APRIL AND MAY, 1919.

Industry.	Establishments reporting for April and May.	Period of pay roll.	Number on pay roll in—		Per cent of increase (+) or decrease (−).	Amount of pay roll in—		Per cent of increase (+) or decrease (−).
			April, 1919.	May, 1919.		April, 1919.	May, 1919.	
Automobile manufacturing	39	1 week	96,355	100,676	+ 4.5	$2,829,255	$3,015,604	+ 6.6
Boots and shoes	68	do	53,140	53,925	+ 1.5	1,053,007	1,102,654	+ 4.7
Car building and repairing	40	½ month	43,001	42,689	− .7	2,351,900	2,322,872	− 1.2
Cigar manufacturing	57	1 week	17,133	17,004	− .8	261,339	277,026	+ 6.0
Men's ready-made clothing	42	do	20,903	21,231	+ 1.6	450,389	468,151	+ 3.9
Cotton finishing	16	do	11,809	12,816	+ 8.5	216,971	248,545	+14.6
Cotton manufacturing	47	do	39,371	44,173	+12.2	580,254	686,722	+18.3
Hosiery and underwear	55	do	23,695	24,350	+ 2.8	324,416	363,144	+11.9
Iron and steel	115	½ month	186,525	178,022	− 4.6	11,734,362	10,744,379	− 8.4
Leather manufacturing	29	1 week	13,739	14,088	+ 2.5	301,608	315,921	+ 4.7
Paper making	51	do	26,111	24,603	− 5.8	534,587	505,016	− 5.5
Silk	37	2 weeks	16,554	16,877	+ 2.0	575,108	613,227	+ 6.6
Woolen	50	1 week	34,224	38,574	+12.7	635,395	740,528	+16.5

A comparatively small number of establishments reported as to the number of persons working on the last full day of the reported pay periods. The following table gives in comparable form the figures for April and May, 1919:

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON THE LAST FULL DAY'S OPERATION IN APRIL AND MAY, 1919.

Industry.	Establishments reporting for April and May.	Period of pay roll.	Number actually working on last full day of reported pay period in—		Per cent of increase (+) or decrease (−).
			April, 1919.	May, 1919.	
Automobile manufacturing	24	1 week	74,073	78,307	+ 5.7
Boots and shoes	29	do	13,832	13,151	− 4.9
Car building and repairing	39	½ month	37,884	38,599	+ 1.9
Cigar manufacturing	19	1 week	4,321	4,314	− .2
Men's ready-made clothing	7	do	9,661	9,820	+ 1.6
Cotton finishing	13	do	8,667	9,598	+10.7
Cotton manufacturing	27	do	17,978	18,452	+ 2.6
Hosiery and underwear	18	do	9,707	9,856	+ 1.5
Iron and steel	95	½ month	147,859	137,629	− 6.9
Leather manufacturing	16	1 week	10,319	10,679	+ 3.5
Paper making	18	do	10,162	10,161	(1)
Silk	24	2 weeks	13,235	13,508	+ 2.1
Woolen	46	1 week	28,855	32,907	+14.0

[1] Decrease of less than one-tenth of 1 per cent.

Changes in Wage Rates.

During the period April 15 to May 15, 1919, there were establishments in 8 of the 13 industries which reported increases in wage rates, and in 2, boots and shoes and iron and steel, decreases. Of the establishments reporting, many did not answer the inquiry relative to this item, but in such cases it is not likely that changes were made.

Automobile manufacturing.—An average increase of 14 per cent was granted to 92 per cent of the employees in one establishment. The whole force in one plant received an increase of 10 per cent, and 50 per cent of the force in another plant were given a 5 per cent increase. One firm reported increases of $3.07 per week to one man, 5 cents per hour to about 3 per cent of the force, and 2½ cents per hour to approximately 5 per cent of the employees. The average hourly rate in one establishment was increased 0.039 cent. One concern reported an increase but failed to give any further information.

Boots and shoes.—One establishment granted an increase of 5 per cent to 34 per cent of the force. All of the employees in one plant were decreased 2 per cent.

Cigar manufacturing.—An increase of 12½ per cent to all productive workers was given in one factory.

Men's ready-made clothing.—An increase of 15 per cent was granted by one establishment and an increase was reported by another establishment, but both failed to give any further information.

Cotton finishing.—An increase of 2 per cent was reported by one establishment, but no data were given as to the number of employees receiving the increase.

Hosiery and underwear.—One establishment granted a general increase of 22½ per cent. A slight increase, which covered only a small portion of the pieceworkers, was reported by another establishment.

Iron and steel.—A number of decreases were reported in iron and steel, many of which were in accordance with the rules of the Amalgamated Association of Iron and Steel Workers. The entire force in two plants was decreased 25 per cent. The rolling mill piecework rates in one plant were reduced 18 per cent. About one-third of the employees in one plant and 15 per cent of the force in another plant were decreased 17½ per cent. The 65 per cent bonus, affecting all of the employees in one mill with the exception of the bar mill pieceworkers, was reduced to 40 per cent. A decrease of approximately 14 per cent, affecting about 50 per cent of the employees, was reported by one plant. About 45 per cent of the employees in one plant received a decrease of about 12 per cent; and a reduction in rates, averaging 11 per cent and affecting 40 per cent of the men, was made by another plant; while a third plant reported a decrease of about 11 per cent, affecting approximately 50 per cent of the employees. A 10 per cent decrease, which affected three-eighths of the employees, was made by one concern, and about 1 per cent of the force in one plant were decreased approximately 9 per cent. Three plants reported percentage decreases of 6, 5, and 3, affecting one-third of the employees, 10 per cent of the force, and about 50 per cent of the employees, respectively.

Paper making.—All of the employees in one mill received an increase of 10 per cent.

Silk.—Two plants granted a 10 per cent increase, affecting the entire force in one and the weavers in the second. The second plant also granted a 5 per cent increase to warpers, packers and other day workers. Eighty per cent of the employees in one establishment received an increase of 5 per cent. All of the employees in three mills received an increase of 4 per cent.

Report of Employment Exchanges in the United Kingdom, March 7 to April 11, 1919.

AS reported by the British Labor Gazette for May, 1919, the total number of workpeople remaining on the registers of the 412 British employment offices on April 11, 1919, was 1,166,913, as compared with 1,009,562 on March 7, 1919. These figures include workers in professional, commercial, and clerical as well as industrial occupations, but exclude casual occupations.

The operations of the employment exchanges for the five weeks are summarized as follows:

OPERATIONS OF BRITISH EMPLOYMENT EXCHANGES DURING FIVE WEEKS ENDING APR. 11, 1919.

Item.	Men.	Women.	Boys.	Girls.	Total.
On registers Mar. 7, 1919	418,174	519,827	35,023	36,538	1,009,562
Number of individuals registered during period	450,997	281,616	37,380	35,574	805,567
Total	869,171	801,443	72,403	72,112	1,815,129
Reregistrations during period	4,638	10,952	724	794	17,108
On registers Apr. 11, 1919	571,849	524,313	33,176	37,575	1,166,913
Vacancies notified during period	106,926	93,515	15,639	17,255	233,335
Vacancies filled during period	74,118	51,956	11,504	11,029	148,607
Applicants placed in other districts	7,667	4,593	1,419	1,544	15,223

The average daily number of registrations, of vacancies notified, and of vacancies filled, during the month was 27,423, 7,778, and 4,954, respectively.

AVERAGE DAILY REGISTRATIONS AND VACANCIES NOTIFIED AND FILLED, BY SEX OF APPLICANTS, DURING FIVE WEEKS ENDING APR. 11, 1919.

Sex of applicants.	Average daily registrations.			Average daily vacancies notified.			Average daily vacancies filled.		
	Five weeks ending Apr. 11, 1919.	Increase (+) or decrease (−) as compared with a—		Five weeks ending Apr. 11, 1919.	Increase (+) or decrease (−) as compared with a—		Five weeks ending Apr. 11, 1919.	Increase (+) or decrease (−) as compared with a—	
		Month ago.	Year ago.		Month ago.	Year ago.		Month ago.	Year ago.
Men	15,188	+1,871	+11,150	3,564	+207	+ 339	2,471	+ 87	+139
Women	9,753	+ 990	+ 5,245	3,117	+ 57	+ 857	1,732	+182	− 32
Boys	1,270	− 71	+ 395	522	+ 42	+ 66	383	+ 32	− 6
Girls	1,212	+ 77	+ 430	575	− 2	+ 146	368	+ 20	+ 43
Total	27,423	+2,867	+17,220	7,778	+304	+1,408	4,954	+321	+135

Compared with the previous month, the daily average of registrations, vacancies notified, and vacancies filled, showed percentage increases of 11.7, 4.1 and 6.9, respectively.

The table following shows, by occupational groups, the number of individuals registered, the vacancies notified, and the vacancies filled, indicating the extent of unemployment in Great Britain during the five weeks ending April 11, 1919:

INDIVIDUALS REGISTERED, VACANCIES NOTIFIED, AND VACANCIES FILLED DURING FIVE WEEKS ENDING APR. 11, 1919.[1]

Occupation groups.	Adults.						Juveniles.			
	Individuals registered during period.		Vacancies notified during period.		Vacancies filled during period.		Vacancies notified during period.		Vacancies filled during period.	
	Men.	Women.	Men.	Women.	Men.	Women.	Boys.	Girls.	Boys.	Girls.
A. Insured trades.										
Building	46,197	555	24,382	179	17,282	149	798	15	597	15
Works of construction	8,472	7	7,277	5	5,853	2	4	.....	4	.....
Sawmilling	4,374	738	966	111	628	95	245	66	166	38
Shipbuilding	15,413	85	7,257	23	5,104	22	305	3	256	2
Engineering	79,709	11,088	19,179	2,479	14,541	2,132	3,193	760	2,674	578
Construction of vehicles	2,661	299	1,432	37	788	31	174	19	145	12
Cabinet making, etc.	1,855	794	1,344	459	460	271	215	78	153	55
Miscellaneous metal trades	12,367	4,842	2,791	1,118	2,070	783	645	619	428	430
Precious metals, etc.	1,545	823	257	300	120	161	203	305	141	148
Bricks and cement	826	645	631	61	232	35	40	15	18	10
Chemicals, etc.	1,911	971	839	260	725	240	120	234	101	212
Rubber and waterproof goods	901	1,203	281	463	259	400	24	122	20	106
Ammunition and explosives	1,054	1,883	786	357	721	342	78	82	72	80
Leather, excluding boots and shoes	1,706	1,774	322	470	213	398	167	172	105	129
Total, insured trades	178,991	25,707	67,744	6,322	49,026	5,061	6,211	2,490	4,880	1,795
B. Uninsured trades.										
Wood, furniture, fittings, etc.	371	366	180	70	77	44	39	57	25	46
Domestic	15,903	67,315	4,139	52,433	2,282	23,590	935	4,779	609	2,048
Commercial and clerical	26,881	18,808	3,615	5,115	2,939	4,529	1,006	1,550	765	1,348
Conveyance of men, goods, etc.	66,385	5,972	8,110	734	5,519	576	3,928	1,594	2,641	1,062
Agriculture	7,083	1,833	4,843	1,033	1,706	541	296	77	161	55
Mining and quarrying	11,946	475	2,326	18	1,203	4	37	3	36	3
Brushes and brooms	226	459	32	114	7	69	18	70	9	54
Pottery and glass	1,597	1,723	337	454	202	359	119	179	82	111
Paper, prints, books, and stationery	5,968	5,839	408	1,126	260	731	257	555	187	346
Textile	31,799	76,188	1,553	6,540	1,224	4,818	285	839	216	647
Dress	3,197	17,544	1,120	10,837	346	5,567	128	1,810	58	1,070
Boots and shoes	3,688	805	884	644	587	374	200	158	136	99
Food, tobacco, drink, and lodging	5,898	12,928	858	4,186	444	3,156	342	1,028	262	876
General laborers	67,513	27,903	8,595	1,462	6,836	1,304	1,085	850	879	734
Shop assistants	9,141	13,905	552	1,341	330	723	303	892	165	537
Government, defense, and professional	11,944	3,016	1,002	732	676	369	416	229	371	187
All others	2,466	830	628	354	453	141	34	25	22	11
Total, uninsured trades	272,006	255,909	39,182	87,193	25,092	46,895	9,428	14,765	6,624	9,234
Grand total—all above trades	450,997	281,616	106,926	93,515	74,118	51,956	15,639	17,255	11,504	11,029

[1] Persons are now registered at employment exchanges according to their normal occupation, or, where there is no normal occupation, according to the work for which they are suitable. This has resulted in a considerable reclassification, especially as regards those who were drawn into special industries during the war.

In the insured trades 204,698 adults registered for work during the period—178,991 men and 25,707 women. There were 82,767 vacancies reported—67,744 men, 6,322 women, 6,211 boys, and 2,490 girls. The number of positions filled was 60,762—49,026 men, 5,061 women, 4,880 boys, and 1,795 girls. The occupational groups in

which there were the largest number of positions filled by adults were: Building, 17,431, and engineering, 16,673.

In the uninsured trades there were 527,915 adults registered—272,006 men and 255,909 women. The number of vacancies reported was 150,568—39,182 men, 87,193 women, 9,428 boys, and 14,765 girls. The total number of positions filled was 87,845—25,092 men, 46,895 women, 6,624 boys, and 9,234 girls. The occupational group in the uninsured trade in which there were the largest number of positions filled by adults was: Domestic, 25,872.

The total number of positions filled by adults in both the insured and uninsured trades during the five weeks ending April 11, 1919, as compared with the preceding month, shows an increase of 33.5 per cent. The increase in the number of positions filled by men was 29.5 per cent; by women, 39.7 per cent. The largest number of adults found employment in the domestic trades.

Volume of Employment in the United Kingdom in April, 1919.

THE following figures as to the condition of employment in Great Britain and Ireland in April, 1919, as compared with March, 1919, and April, 1918, have been compiled from figures appearing in the British Labor Gazette for May, 1919. Similar information for January was published in the April LABOR REVIEW.

In comparing April, 1919, with March, 1919, relative to the number of employees, respective increases of 8.9, 7.9, 5.7, and 5 per cent are shown in cement, brick, printing, and corset trades. The largest decreases—4.3 and 3 per cent—appear in seamen and in the linen trade.

The aggregate earnings of employees in April, 1919, as compared with March, 1919, show increases of 15.4, 12.4, and 10.9 per cent in brick, cement, and the carpet trades, respectively. A decrease of 8.7 per cent is shown in the linen trade.

In April, 1919, as compared with April, 1918, as to the number of persons employed, the cement trade shows an increase of 36.7 per cent; dock and riverside labor, an increase of 26.8 per cent; and the printing trade, an increase of 22.9 per cent. The largest decreases—10.2 and 10.1 per cent—appear in the linen trade and building and construction.

Comparing April, 1919, with April, 1918, on the question of earnings of employees, more important changes are shown. All except one are increases. Increases of 58.6 and 58.2 per cent are shown in the cement trade and printing, respectively. Seventeen trades show in-

creases ranging from 16.1 to 41.3 per cent, while the lace trade shows an increase of 5.9 per cent. The linen trade shows a decrease of 7.2 per cent.

VOLUME OF EMPLOYMENT IN THE UNITED KINGDOM (GREAT BRITAIN AND IRELAND) IN APRIL, 1919, AS COMPARED WITH MARCH, 1919, AND APRIL, 1918.

[Compiled from figures in the Labour Gazette, London, May, 1919.]

Industries, and basis of comparison.	Per cent of increase (+) or decrease (−) in April, 1919, as compared with—	
	March, 1919.	April, 1918.
Coal mining: Average number of days worked	− 1.1	− 2.4
Iron mining: Average number of days worked	(1)	− 2.5
Quarrying: Average number of days worked	+17.9	− 1.2
Pig iron: Number of furnaces in blast	+ .7	− 9.4
Iron and steel works:		
Number of employees	− .5	− 2.7
Number of shifts worked	+ .7	− 4.6
Tinplate, steel, and galvanized sheet trades: Number of mills in operation	+ 5.8	+38.3
Cotton trade:		
Number of employees	+ 3.9	+ .4
Earnings of employees	(1)	+41.0
Woolen trade:		
Number of employees	+ 2.1	+ 1.5
Earnings of employees	+ 4.1	+33.3
Worsted trade:		
Number of employees	+ 1.8	+ 3.8
Earnings of employees	+ 3.8	+35.8
Hosiery trade:		
Number of employees	+ 1.4	+ .8
Earnings of employees	+ 5.2	+16.3
Jute trade:		
Number of employees	− .8	− 2.9
Earnings of employees	− 1.9	+21.4
Linen trade:		
Number of employees	− 3.0	−10.2
Earnings of employees	− 8.7	− 7.2
Silk trade:		
Number of employees	+ 2.1	+ 1.1
Earnings of employees	+ 1.8	+23.2
Carpet trade:		
Number of employees	+ 2.4	+ 7.9
Earnings of employees	+10.9	+39.3
Lace trade:		
Number of employees	+ 2.9	− 5.0
Earnings of employees	+ 6.0	+ 5.9
Bleaching, printing, dyeing, and finishing:		
Number of employees	+ 1.2	− 2.5
Earnings of employees	+ 1.2	+18.4
Boot and shoe trade:		
Number of employees	+ 3.7	+ 6.3
Earnings of employees	+ 6.9	+27.2
Leather trades: Number of employees [2]	+ .2	− .1
Tailoring trades:		
Number of employees	+ 4.0	− 1.9
Earnings of employees	+ 9.7	+18.5
Shirt and collar trade:		
Number of employees	+ 2.2	+ 1.6
Earnings of employees	+ 2.9	+20.0
Other clothing trades:		
Dressmaking and millinery—		
Number of employees	+ 4.0	+ 9.6
Other clothing trades—Con.		
Wholesale mantle, costume, blouses, etc.—		
Number of employees—		
London	+ 2.5	− 1.4
Manchester	+ 1.1	− 3.5
Glasgow	+ 1.7	− .9
Corset trade: Number of employees	+ 5.0	+ 1.1
Building and construction of works: Number of employees [2]	+ .1	−10.1
Woodworking and furnishing trades: Number of employees [2]	+ .4	(3)
Brick trade:		
Number of employees	+ 7.9	+16.5
Earnings of employees	+15.4	+41.3
Cement trade:		
Number of employees	+ 8.9	+36.7
Earnings of employees	+12.4	+58.6
Paper, printing, and bookbinding trades:		
Paper trades—		
Number of employees reported by trade-unions [2]	(3)	(3)
Number of employees reported by employers	− 2.0	− 2.5
Earnings of employees reported by employers	− .9	+16.9
Printing trades—		
Number of employees reported by trade-unions [2]	+ .7	− 2.0
Number of employees reported by employers	+ 5.7	+22.9
Earnings of employees reported by employers	+ 8.7	+58.2
Bookbinding trades—		
Number of employees reported by trade-unions [2]	− .7	− 3.4
Number of employees reported by employers	+ 3.9	+10.0
Earnings of employees reported by employers	+ 3.9	+32.5
Pottery trade:		
Number of employees	+ 1.7	+ 1.6
Earnings of employees	+10.0	+27.2
Glass trades:		
Number of employees	+ 4.5	+ 2.4
Earnings of employees	− .1	+16.1
Food preparation trades:		
Number of employees	+ 4.5	+19.2
Earnings of employees	+ .5	+39.7
Dock and riverside labor: Number of employees	+ 4.5	+26.8
Seamen: Number of employees	− 4.3	+ 4.8

[1] No change. [2] Based on unemployment returns. [3] No report.

Demobilization and Employment in France.[1]

ALTHOUGH during the war publicists, among both workers and employers, and public authorities gave some attention to the problem of reconstructing industry and employment after the war, it does not appear that any study was carried very far, or that any definite measure was taken.

On November 13, 1917, the Minister of Labor asked a mixed commission in each Department "to consider methods of demobilization most favorable to the resumption of economic life." The reports of these commissions appeared a few days before the armistice was signed.[2] Five of them favored a thorough investigation of the country's needs and resources in labor, equipment, and raw materials, and a systematic demobilization based on strictly economic principles. The rest declared for a simple demobilization either by army classes—i. e., according to the age of the men, as in mobilizing—or by professional and trade categories.

In the first six months of 1918 there were at least three plans proposed to secure definite and complete information as a basis for planning for the industrial period after the war. The National Assembly at one time and the Ministry of Commerce at another proposed an industrial census, an inventory of economic needs and resources. Likewise the Ministry of Munitions designed a questionnaire to elicit full information as to personnel, equipment, and stock in war industries. But for different reasons all these measures failed to produce satisfactory results. The Ministry of War decided that information as to the civil status, domicile, occupation, etc., should be obtained from every soldier; but, as the distribution of questionnaires for this purpose did not start until November 15, 1918, after the armistice, it is doubtful whether the results can be classified in time to be of much service.[3]

Demobilization.

Immediately the armistice was signed, the Government faced the great economic problem of replacing several million men in normal productive life. The difficulties were increased by the return of prisoners and the necessity of converting to normal purposes the personnel of munitions factories. Should demobilization be by army classes or by professional and trade categories? Partisans of the

[1] La Démobilisation et le Marché du Travail, Bulletin No. 21, Jan. 31, 1919, of the Association Française pour la Lutte contre le Chômage et pour l'Organisation du Marché du Travail.

[2] Travaux des Commissions mixtes départementales pour le maintien du travail national. Vol. V, 1918.

[3] In England a similar investigation was started in March, 1916, and continuously kept up to date.

army class method claimed that the former was the only absolutely fair way; supporters of the trade category plan maintained that the only one that promised success was a systematic demobilization according to the professional or trade capacity of each man. By December the Government had committed itself to the army class system—that is, to demobilize practically as it had mobilized. In some respects, nevertheless, the system proved too rigid, and many suggestions were made, two of which were apparently adopted. One was to advance a soldier one class for each of his children—for instance, a soldier of the class of 1912, having one child, would be demobilized with the class ahead of his; the other, following England's example, was to discharge before their class certain business men,[1] who by reopening and rebuilding their business could furnish work to other demobilized or unemployed men.

Employment.

By Government decree of November 26 the Ministry of Munitions became the Ministry of Industrial Reconstitution.[2] The minister outlined plans for avoiding unemployment, such as facilitating the return of war workers whose homes were in previously invaded regions; transferring men mobilized in war factories to the Service of Public Works; granting unlimited leave to farmers working in powder mills; discharging foreign workmen, enemy prisoners, and wives of demobilized soldiers, working in munitions factories. He declared his intention of opening all his resources to labor, of prolonging war work, of obtaining orders from other branches of Government for new articles to be made in war factories, of furnishing raw material to manufacturers not executing war work, and of cooperating with employment bureaus.

The conversion of war factories to peace purposes, although designed to absorb a large part of idle labor or to prevent labor from becoming idle, at first aggravated the crisis of unemployment. Although overtime and night work were stopped and the hours of work cut down, dismissals from employment had commenced by December 1. Women were affected the most, large numbers being discharged. The Ministry of Industrial Reconstitution encouraged employers to retain women workers, even on five-hour days, five and a half days a week, with corresponding reduction in pay. This was done in Government establishments.

To encourage the women to quit voluntarily the Government offered a fixed sum, calculated on the length of service, to those who left positions in Government factories before a certain date, set at

[1] Called "pivotal men" in England.

[2] See MONTHLY LABOR REVIEW for February, 1919 (p. 257).

December 15 and subsequently extended to January 5, 1919. Private concerns were urged to follow this example. While the measure induced many women to quit, it drew a vigorous protest from some elements of organized labor, notably, the Federation of Metal Workers.

When at the beginning of 1919 numbers of men also were out of work, protest meetings of unemployed became common, and conferences were held between the labor delegates and Government officials. On January 18 the Minister of Industrial Reconstitution made an agreement with these delegates that all men and women quitting work in war factories, provided they had entered service at least one month before the armistice, should receive a discharge bonus equal to 20 days' pay, two-thirds payable at once by the Government, and the rest by the employer. In addition, unemployed persons were to receive for a certain period allowances for dependents.

With a view to extending the provisions of the Labor Code relative to labor contracts,[1] a special law was passed specifying that "every management, office, or enterprise, public or private, must guarantee its mobilized personnel, when possible, the employment held at the time of mobilization." It also provides that the discharged soldier, if still able and capable, must be reinstated at current wages, and if incapable of performing the work of his original position, or in case that position no longer exists, he must be given an analogous or equivalent one; labor contracts will be resumed and will extend through the time unexpired at the time of mobilization; the discharged soldier may, within one month after demobilization, refuse to continue a prewar labor contract; the employer may not annul such a contract by showing another contract with a man replacing the soldier, the older contract, suspended by the fact of mobilization, always taking precedence. The law provides that seniority shall not be affected by absence from work by reason of mobilization.

The soldiers' automatic return to their old jobs, however, seems not to have worked out successfully, due probably to the complete disappearance of so many enterprises and the inability of others to resume operations on a prewar scale. Moreover, the "when possible" phrase offered a loophole, and there was nothing to prevent rehiring a man and then, a few days later, the law having been complied with, discharging him.

The resumption of work on public works throughout the country was not sufficient to solve the whole unemployment problem. On the other hand, private business was timid. Manufacturers protested against the competition of Government factories which were kept going and the orders given to new firms—"war babies"—that had

[1] Le Code du Travail, arts. 20—25.

sprung up, which, never having produced anything except through Government aid, were now flooding the market with overproduction.

The public employment offices, prepared by the experience of three very busy years and aided by the labor inspectors, labor unions and employers' organizations, together with the unemployment benefit funds, did the most to meet the situation.

In January the Ministry of Labor increased the rates of unemployment benefits and encouraged all Departments and communes, which had not already done so, to establish local employment offices to handle unemployment funds and secure positions for those out of work. The Government aided in defraying the expenses of such offices as follows:

Twenty per cent for bureaus securing positions for 20 to 50 persons per month.
Twenty-five per cent for bureaus securing positions for 51 to 100 persons per month.
Thirty per cent for bureaus securing positions for 101 to 200 persons per month.
Thirty-five per cent for bureaus securing positions for 201 to 500 persons per month.
Forty per cent for bureaus securing positions for more than 500 persons per month.

While the country is regaining its economic balance, the Government will continue the allowances and benefits for the families of discharged soldiers which it instituted some time ago.

All hopes of regulating the labor market are centered in the public employment bureaus. The Minister of Labor thinks [1] that it is in magnitude only that the present unemployment problems differ from those which the employment offices have had to solve and that former methods should be applied in the present crisis.

The task of France is "to organize the labor market so as to help as soon as possible the men, who must not become loafers after having been the liberators of civilization." [2]

[1] Circular of Nov. 18, 1918.
[2] Sous-Secrétaire d'Etat à l'administration militaire, in the Chamber of Deputies Nov. 22, 1918.

WAGES AND HOURS OF LABOR.

Industrial Survey Conducted by United States Bureau of Labor Statistics.

Early in 1919, at the request of the War Industries Board, the Bureau of Labor Statistics began an industrial survey to obtain a definite and reliable body of information concerning the actual wages and hours of labor and other conditions of employment in the more important industries of the country distributed throughout 41 States and the District of Columbia, the selection being based largely upon the number of wage earners. The information was gathered by agents of the bureau, who visited establishments and copied the data directly from the pay rolls. The industries covered include the following:

Automobile.
Brick and tile.
Cars.
Chemicals.
Cigar.
Clothing, men's.
Clothing, women's.
Coal, anthracite.
Coal, bituminous.
Confectionery.
Electrical apparatus.
Foundry.
Furniture.
Glass.
Hosiery and knit goods.
Hotels and restaurants.
Iron and steel.
Leather.
Lumber.
Machine shop:
  Engine, etc.
  Machine tool.
Millwork.
Overall.
Paper and wood pulp.
Paper box.
Rubber.
Silk.
Typewriter.

The preliminary report of the results of this survey has been sent to the printer. It represents the basic facts concerning the hours worked and the earnings received by the employees in different occupations. In later reports, each covering a single industry, the additional information collected in the schedules will be more systematically and extensively worked over, and such conclusions as may be drawn from them concerning piece work and time work, male and female employees, day and night work, the amount of overtime and the pay for it, and other similar questions will be pointed out.

No such extensive, and at the same time reliable, body of information bearing upon the economic well-being of the wage earners of the United States has before been presented in a single report.

Earnings in Manufacturing Industries in New York State in March, 1915 to 1919, Inclusive.

THE bureau of statistics and information of the New York State Industrial Commission has recently published very comprehensive data regarding the average weekly earnings of labor in the factories of the State for March of each year, 1915 to 1919, inclusive, and also comparative index numbers of average weekly earnings and of retail prices of food in the United States at the same date.[1] The figures are reproduced in the following tables, the first table showing the average weekly earnings in specified industries for the State as a whole, with a separate statement of average weekly earnings in factories in New York City and in factories outside of New York City. In the second table are shown index numbers of average weekly earnings in New York State factories and of retail prices of food in the United States, June, 1914, being taken as the base, or 100.

AVERAGE WEEKLY EARNINGS IN MARCH, 1915 TO 1919, IN FACTORIES OF NEW YORK STATE.[2]

Industry.	Average weekly earnings in March—				
	1915	1916	1917	1918	1919
Stone, clay, and glass products	$13.10	$13.76	$16.49	$18.79	$24.45
Miscellaneous stone and mineral products	16.98	15.75	18.96	20.26	25.03
Lime, cement, and plaster	12.54	13.26	16.41	19.65	25.96
Brick, tile, and pottery	11.34	12.01	13.49	16.85	21.58
Glass	13.19	13.72	16.19	18.13	24.63
Metals, machinery, and conveyances	14.57	16.09	18.07	21.74	25.43
Gold, silver, and precious stones	14.26	15.85	18.11	19.68	21.71
Brass, copper, aluminum, etc	14.09	14.09	16.79	19.23	22.53
Pig iron and rolling mill products	15.37	18.93	23.53	27.95	33.52
Structural and architectural ironwork	14.52	16.29	19.39	21.25	30.96
Sheet metal work and hardware	13.15	13.28	14.94	17.93	21.36
Firearms, tools, and cutlery	14.65	16.35	17.22	21.73	21.74
Cooking, heating, and ventilating apparatus	14.36	15.29	18.18	22.47	26.57
Machinery (including electrical apparatus)	13.89	15.80	17.43	21.05	24.52
Automobiles, carriages, and airplanes [3]	18.00	17.08	19.54	23.01	25.74
Cars, locomotives, and railway repair shops	14.24	16.47	18.74	23.57	26.96
Boat and ship building	18.75	22.19	20.97	24.37	31.76
Instruments and appliances	14.06	15.16	16.04	18.15	21.58
Wood manufactures	12.38	13.12	14.80	16.77	19.52
Sawmill and planing mill products	12.39	13.21	14.48	16.48	20.24
Furniture and cabinet work	13.08	13.21	14.86	17.51	20.21
Pianos, organs, and other musical instruments	13.21	14.93	16.78	17.26	18.92
Miscellaneous wood and allied products	10.65	11.10	12.80	15.58	18.69
Furs, leather, and rubber goods	11.73	12.89	14.88	17.13	20.75
Leather	10.59	12.03	14.93	17.07	20.09
Furs and fur goods	11.34	13.66	17.27	21.87	28.09
Boots and shoes	12.38	13.72	15.48	17.63	21.46
Miscellaneous leather and canvas goods	11.66	11.97	13.47	15.81	18.61
Rubber and gutta-percha goods	11.29	12.10	14.42	16.34	19.52
Pearl, horn, bone, celluloid, hair, etc	9.59	10.49	12.44	14.58	17.53
Chemicals, oils, paints, etc	13.56	14.04	16.19	18.60	21.82
Drugs and chemicals	13.12	13.89	15.61	17.13	19.56
Paints, dyes, and colors	14.85	14.68	15.28	17.72	20.85
Animal and mineral oil products	12.96	13.81	16.39	19.61	23.43
Miscellaneous chemical products	14.22	14.40	16.68	18.46	21.89
Paper	13.30	14.64	15.74	19.69	24.09
Printing and paper goods	14.61	15.71	16.47	18.67	23.03
Paper boxes and tubes	10.69	11.11	12.12	13.64	16.91
Miscellaneous paper goods	12.07	12.38	13.16	14.74	17.95
Printing and book making	16.22	17.33	18.04	20.46	25.23

[1] The Labor Market Bulletin, March, 1919. Albany.

[2] Includes all employees in both office and shop. It is commonly the case that office salaries are higher than the average weekly earnings of shop employees. However, the office employees form such a small percentage of the total number of workers that their effect, in the computation of the average wage, is negligible.

[3] Factories manufacturing airplane engines only are classified with "machinery."

AVERAGE WEEKLY EARNINGS IN MARCH, 1915 TO 1919, IN FACTORIES OF NEW YORK STATE—Concluded.

Industry.	Average weekly earnings in March—				
	1915	1916	1917	1918	1919
Textiles	9.69	10.58	12.13	14.60	15.86
Silk and silk goods	9.47	10.34	11.37	12.83	15.05
Wool manufactures	10.26	11.12	12.77	15.67	17.46
Cotton goods	9.96	10.64	12.80	15.34	14.56
Cotton and woolen hosiery and knit goods	9.19	9.98	11.38	14.07	14.27
Other textiles and allied products	9.81	11.04	12.80	15.64	17.83
Clothing, millinery, laundering, etc	11.11	12.48	14.02	16.01	19.02
Men's clothing	11.12	12.65	14.60	16.60	19.22
Men's shirts and furnishings	8.69	9.91	11.27	12.50	12.78
Women's clothing	16.32	17.25	19.44	22.37	28.15
Women's underwear and furnishings	9.36	10.07	11.26	12.72	15.45
Women's headwear	12.40	13.46	15.91	19.99	22.97
Miscellaneous sewing	8.68	9.14	9.35	9.98	13.15
Laundering, eclaning, dyeing, etc	9.15	9.45	10.56	12.31	15.20
Food, liquors, and tobacco	11.77	12.70	14.16	15.87	19.90
Flour, feed, and other cereal products	15.04	15.56	17.33	20.42	23.87
Fruit and vegetable canning and preserving	10.06	11.49	12.50	15.05	17.88
Groceries not elsewhere classified	12.88	14.29	16.00	18.21	22.76
Slaughtering, meat packing, and dairy products	13.72	15.13	16.68	19.57	25.14
Bread and other bakery products	11.58	12.31	13.44	15.02	19.91
Confectionery and ice cream	9.74	9.82	10.85	11.23	14.90
Beverages	18.80	19.24	20.01	22.04	26.35
Cigars and other tobacco products	8.53	9.58	11.54	13.12	15.68
Water, light, and power	15.20	17.11	18.28	20.41	26.30
Total, all factories in State	12.65	13.96	15.79	18.71	22.20
Per cent of increase over 1915, all factories in State		10.36	24.82	47.90	75.49
Factories in New York City	12.99	14.20	15.68	17.91	22.48
Factories outside New York City	12.43	13.82	15.85	19.14	22.03

COMPARATIVE INDEX NUMBERS OF AVERAGE WEEKLY EARNINGS IN NEW YORK STATE FACTORIES AND OF RETAIL FOOD PRICES IN THE UNITED STATES.

[The figures are indexes, with June, 1914, as 100. Those for prices are derived from the relative prices published by the United States Bureau of Labor Statistics.]

Month.	1914		1915		1916		1917		1918		1919	
	Average weekly earnings, New York factories.	Retail food prices, United States.	Average weekly earnings, New York factories.	Retail food prices, United States.	Average weekly earnings, New York factories.	Retail food prices, United States.	Average weekly earnings, New York factories.	Retail food prices, United States.	Average weekly earnings, New York factories.	Retail food prices, United States.	Average weekly earnings, New York factories.	Retail food prices, United States.
January	.....	.....	98	104	107	108	120	129	[1] 132	162	181	187
February	.....	.....	98	102	108	107	121	134	139	163	174	174
March	.....	.....	100	99	110	108	124	134	147	156	175	177
April	.....	.....	99	100	111	110	122	146	152	156	.....	.....
May	.....	.....	100	101	112	110	127	153	157	160	.....	.....
June	100	100	101	101	113	113	128	154	161	164	.....	.....
July	99	103	100	101	111	112	127	147	164	169	.....	.....
August	99	108	102	101	114	114	129	151	167	173	.....	.....
September	98	108	101	102	117	119	134	155	176	180	.....	.....
October	97	106	105	104	118	122	136	159	176	183	.....	.....
November	97	106	106	105	119	127	139	157	[2] 170	185	.....	.....
December	99	106	106	106	122	127	139	159	183	189	.....	.....
Average for year	98	105	101	102	114	115	129	147	160	170	.....	.....

[1] Drop due to Fuel Administrator's closing order.
[2] Drop due to closing of factories on Nov. 11 (Armistice day).

Comparison of Wage Payment Methods.

THE methods of wage payment as related to production and their effect upon the worker is discussed in a recent issue of Industrial Management.[1] The different methods considered by the author are: Hourly rate, yearly salary, premium, task and bonus, piecework, and profit sharing.

It is stated that the hourly rate is the most pernicious of all and the least productive of friendly feelings between employer and employee. It is also by far the most used. It implies, if it does not prove, that the employer confesses that he does not know how much work a man ought to do, but prefers to take a chance rather than to set a definite task or to agree to a definite price. In other words, he bets that his employees know less about it than he does.

A yearly salary is justifiable only when the employee is engaged in originating something—ideas, usually. A man who is really on the job 24 hours a day deserves a salary. Any man who would work at the same job without a salary if he could, deserves a salary. In fact, in any case where the worker has his heart in his work he should have a salary. It is, however, a most unbusinesslike thing to accept a salary, for the recipient throws away one of the greatest incentives to his growth when he accepts it. When a man is working at piece rates his income automatically increases as he grows more expert and capable, whether it is feeding punch presses or selling them; but when he accepts a salary he places himself where his employer can only guess his value by reason of the offers which he gets to go elsewhere. He no longer has a gauge by which to discover whether he is growing or shrinking, and he becomes the victim of opinion—opinion as formed by impressions which the employer receives from fellow workers and others who come in contact with both.

The premium system confesses immediately to a doubt as to what a workman can or should do. It virtually says to the man, "You know that I am human and that I would not let you earn over $5 a day at piece rates, but here is a scheme by which I will only take away from you one-half of what you earn in excess of your daily rate." After a while workmen come to see it in this light; therefore its use is not broadspread.

The task and bonus system recognizes the fact that we have talked hourly rates so long that everybody makes comparisons by that method. Therefore it pays men by the hour, but if they do more than a given "stint" it pays them an extra bonus which may or may not be in

[1] "The principles of employing labor," by E. H. Fish, in Industrial Management for May, 1919, pp. 373-377. 6 East Thirty-ninth Street, New York.

proportion to production. As a half-way measure toward the right thing both premium and task and bonus systems have great merit.

Piecework has been abused so much and in such a spirit of open meanness, that while it has all the virtues that we can require, it is very hard to reestablish in many places which need it. Its two faults are, or have been, the setting of rates while in complete ignorance of how much work could be done in a day or a year, and the cutting of rates when this ignorance proved costly. Really the first was the only fault, the second came through self-preservation.

A piece rate based on past performance under an hourly rate has no scientific value. That method of setting rates has made the stop watch something despised by workmen and a laughing stock for the few who have endeavored to get at a true rate. Almost every repetitive job in a manufacturing establishment can be divided into the actual work done, which it is easy to calculate from the drawing, and the time spent and wasted in looking for the tools, rigging, etc., with which to do it, and in making necessary adjustments. Whenever piecework rates are set and the workmen really believe that the firm will maintain them, no matter how much the workmen may earn, there is an immediate demand for tools and equipment which will allow them to make big money. It will surprise almost any shop superintendent to take any single job in his shop and discover how large a proportion of the time of his so-called producer is spent in hunting for things which should be at his elbow. One shop which has a most excellent name for efficiency discovered that its 20 gangs of erectors had only one tap wrench of a size which all needed. At least one man was spending all his time hunting for or waiting for that wrench. Small tools disappear as mysteriously as gold coin when a shortage is imagined, and for the same reason. Everyone wants to be sure that he has something with which to work so he takes what he can get and hides it.

Successful use of piece rates can be expected only when the rates are set after definite experiment has shown how long it actually takes to do the operation under consideration, the wasted time being reduced to a reasonable and computable limit, and when assurance is given and lived up to that the rate, once set, will be maintained, no matter if the workman in question makes more than his boss.

It is, however, an admission of ignorance or incompetence on the part of the management to be in such a position that routine work can not be put on a satisfactory piece-rate basis. It has been necessary in almost every place where scientific piece rates have been installed to take away from the foreman the function of leadership, and reduce him to the standing of a disciplinarian. The great

majority of present-day foremen do not know how to originate ways of doing work adaptable to the machinery and tools available for the job. They can only do what they did in "the old shop." It has been found necessary to institute a planning department, for which old foremen have seldom been found suited. In fact, it seems as though the problem of what to do with the foremen who are obstructing production in our shops to-day is going to be one of the great problems which must be solved before the simple and rational straight piece rate is a complete success.

Another possibility in the distribution of financial rewards is profit sharing. There is very little of this done. There are numerous plants which hand their employees a check or pay envelope at the end of the year which is marked "Share of profits," but it does not mean anything to the recipient except that a part of his rightful wage has been held up. He can not see his part in it, and neither can his employer, for he has no part in it. In order for profit sharing to be true to name the recipient must be able to see from time to time that he has or has not added to the profits which he will share. More than that, he must have such tenure that he can be assured of some income from the profits which he helps to make and which are turned into surplus or building and equipment. If he leaves the company he should have something in the nature of stock which has a market value, and which he can take or sell. Most firms which sell stock to employees sell something which it is agreed shall be turned back at a price less than what its market value is hoped to be.

The only true profit sharing consists in sale of stock to employees on easy terms without any brokerage charge. The sale should be outright with no strings. The man should be as truly a stockholder as any other man. He should almost be compelled to attend stockholders' meetings to be sure that he understands the financial statements which are made. When he leaves the employ of the company he should not be compelled to surrender his stock, nor should the company be bound to buy it. He should, however, be obliged to offer it to the company at the market price if he wishes to sell at all, and the company should be willing to buy in its own stock even though no agreement exists.

No scheme of this kind should be started which, on its face, indicates that employees can never control enough of the stock to become a factor in the control. In fact, it is doubtful if any great enthusiasm can be expected unless the possibility of becoming a strong and recognized minority is not present. Why own stock in the concern for which one works, if ownership means nothing but dividends? Why not leave the money in a savings bank?

Any concern which doubts the ability of anyone except the present owners to carry on the business successfully should not try profit sharing, for the only kind that it will consider will not be accepted by most of its employees.

Wages and Labor Conditions in Gold Mining.

IN the April, 1919, issue of the MONTHLY LABOR REVIEW (pages 177, 178), there appeared a table showing wages in various occupations in gold mining. The source of the information, as noted in the article in question, was a report on the gold situation by the Department of the Interior. The immediate authority for the table was stated to be the engineer of the California Metal Producers' Association.

Among the companies whose wage rates were quoted was the Phelps-Dodge Corporation, of Bisbee, Ariz. That corporation now informs this bureau that some of the rates quoted as applicable within that corporation were incorrect. The bureau, therefore, takes this opportunity to give the corrected figures for the Phelps-Dodge Corporation.

WAGE RATES PAID BY PHELPS-DODGE CORPORATION, BISBEE, ARIZ.

Date and occupation.	Quoted rate per day.	Corrected rate per day.
September, 1913:		
Machine men	$4.00	$4.00
Muckers	3.75	3.75
September, 1914:		
Machine men	4.00	3.60
Muckers	3.75	3.35
September, 1915:		
Machine men	4.10	4.10
Muckers	3.85	3.85
September, 1916:		
Machine men	5.32	5.35
Muckers	5.07	5.10
September, 1917:		
Machine men	5.60	5.35
Muckers	5.35	5.10
September, 1918:		
Machine men	5.50	6.10
Muckers	5.25	5.85

Wages Paid to Certain Classes of Labor in British Columbia.

THE annual report of the British Columbia (Canada) Department of Labor for the year ending December 31, 1918,[1] gives tables of wage rates of many groups of industries in the Province, the figures being corrected to July 31, 1918. The tabulations are based on

[1] British Columbia. Department of Labor. Annual report for the year ending Dec. 31, 1918. Victoria, 1919. 76 pp.

returns from more than 1,000 firms. There is a summary table from which the following compilation is made, the figures covering the week of employment of the greatest number of wage earners:

NUMBER OF WAGE EARNERS RECEIVING EACH SPECIFIED WEEKLY WAGE RATE.

Wage group.	Males.		Females.	
	18 years and over.	Under 18 years.	18 years and over.	Under 18 years.
Under $7	38	157	48	82
$7 to $8.99	59	197	128	123
$9 to $11.99	172	246	416	118
$12 to $15.99	2,124	263	326	45
$16 to $19.99	5,176	150	86	2
$20 to $24.99	11,657	104	67	2
$25 to $29.99	8,677	52	11	1
$30 to $49.99	16,492	15	8	1
$50 and over	825	2	.....	.....
Total	45,220	1,186	1,090	374

Of 40,952 men recorded, the group working from 48 to 54 hours per week, July 31, 1918, had the largest proportion, the number being 9,752, or 23.8 per cent. Approximately 44 per cent were working 48 or less hours per week.

The report notes briefly the work of the free employment bureau at Vancouver, the strikes that occurred during 1918, and the report of the Minimum Wage Board giving the text of the first three decrees entered by the board, affecting the wages of females over 18 years of age, of those under 18 years, and of apprentices in the mercantile industry. These decrees were noted in the June, 1919, MONTHLY LABOR REVIEW (pp. 207 and 208). Rates of wages paid to females in the mercantile, laundry, and cleaning and dyeing industries are given, based on returns from 174, 17, and 13 employers, respectively. The following table is a summary of these returns:

WEEKLY RATES OF WAGES PAID TO FEMALES IN THE MERCANTILE, LAUNDRY AND CLEANING AND DYEING INDUSTRIES IN BRITISH COLUMBIA IN 1918.

Industry.	Number of employees.	Number receiving wage rates of—			
		Under $8.	$8 and under $11.	$11 and under $15.	Over $15.
Mercantile	2,043	290	790	586	377
Laundry	476	27	237	172	40
Cleaning and dyeing	29	.....	2	13	14
Total	2,548	317	1,029	771	431
Per cent	100.0	12.4	40.4	30.3	16.9

The Rise in Rates of Wages in Great Britain During the War.

AN article in the British Labor Gazette for May, 1919, (pp. 172–174) outlines the general wage conditions at the beginning of the war and gives the amounts of the advances in wages in the different trades from the close of 1914 to the end of April, 1919.

While there had been a general rise in wages in England for the three years previous to the war, there had also been a tendency toward reduction in the first part of 1914. By the end of that year, however, the rise in the cost of food and the increased demand for labor had checked this tendency so that in the early part of 1915 both war bonuses and wage increases were granted to railway and shipyard employees and to large numbers in the engineering trades. These increases spread to other trades and by the middle of 1916 practically all the important industries had granted them. These original increases have been generally augmented following the continued rise in the cost of living though there has been considerable variation in the amounts. In general, the munition, transport, and other essential industries, such as coal mining, have been the first ones each time to give the additional wages—shortage of labor being an important factor in the granting of increases.

Building Trades.[1]

Local conditions have affected the wage increases in the building trades, so there has been considerable variation in the amounts, but in the large towns the total increases range between 7½d. and 10½d. (15 and 21 cents) an hour. A table covering cities with populations of more than 100,000 gives the per cent of increases in these trades as ranging between 88 and 129 per cent, the lowest being for bricklayers and the highest for builders' laborers. These figures, combined on the basis of the number of men employed in the different occupations, give an average increase of 8¾d. (17½ cents) an hour, which is nearly 110 per cent of prewar wages. In some cases the hours of work have been reduced to 47 or 44 per week, with a corresponding increase in hourly rates in order to maintain the weekly wages at the same level. Taking into account, therefore, all the reductions in normal weekly hours during the war, the advance in wages in these trades for a full normal week is about 100 per cent.

[1] Cf. article in the MONTHLY LABOR REVIEW for June, 1919, pp. 177–180.

Mining.

In coal mining the increases up to 1917 were mainly on a percentage basis, the wages ranging in the summer of that year, in different areas, from 28 to 47 per cent higher than those paid in August, 1914. In September, 1917, however, the controller of mines ordered additional flat-rate increases which have twice been raised, so that at the present time miners are receiving a bonus of 5s. ($1.22) a day. Special arrangements for certain classes of workers in different localities have resulted in raising these averages and in some places the standard rates have been raised. As there is wide variation in the standard rates it was difficult to determine the average increase, but it is believed that wages are probably from 110 to 120 per cent greater than the prewar average for all classes of workers at coal mines. Wages, including bonuses, have more than doubled in iron mines and open works.

Metal, Engineering, and Shipbuilding Trades.

In iron and steel manufacture percentage additions to the standard rates have been made and cost of living bonuses awarded. These advances in rates range for different occupations from 51 to 150 per cent, with bonuses of from 2s. 10d. (69 cents) to 3s. 9d. (91 cents) per shift. Iron and steel millmen and iron puddlers in the principal districts have had their wages increased from 113 to 117½ per cent.

In the engineering and shipbuilding trades a general minimum war wage advance of 28s. 6d. ($6.93) per week over prewar rates has been granted for men employed at time rates and of 10 per cent on prewar rates, plus 21s. 6d. ($5.23), for men working at piece rates. A bonus of 12½ per cent on earnings for time workers and 7½ per cent for pieceworkers was given to men over 21 years of age engaged on munitions work and has been extended generally to private work. Other advances, ranging from 10 to 35 per cent, have been given to special workers engaged in shipbuilding and repair work.

The following table shows the average amount of increase (inclusive of the 12½ per cent bonus) granted from August 4, 1914, to April 30, 1919, on the district time rates for men in certain representative occupations in a number of the principal engineering and shipbuilding centers, and the percentage increases over prewar rates:

AVERAGE AMOUNT OF INCREASE AND RATE OF INCREASE PER WEEK IN PRINCIPAL OCCUPATIONS IN THE ENGINEERING AND SHIPBUILDING TRADES DURING THE WAR PERIOD.

Occupation.	Average (unweighted) increase in weekly time rates (including the bonus of 12½ per cent) in the principal centers, from Aug. 4, 1914, to end of April, 1919.	
	Amount of increase per week.	Percentage increase over prewar rates per week.
Engineering:		
Fitters and turners	37s. 11d. ($9.23)	98
Ironmolders	38s. 2d. ($9.29)	92
Laborers	35s. 5d. ($8.62)	156
Shipbuilding:		
Platers	37s. 4d. ($9.08)	93
Riveters	37s. 0d. ($9.00)	98
Shipwrights	37s. 7d. ($9.14)	91
Laborers	35s. 2d. ($8.56)	154

Hours have been reduced from 53 or 54 to 47 without reduction in weekly time rates.

Minimum rates for women and girls in these trades have been increased to 38s. ($9.25) per week for those not doing men's work, while higher rates are paid to women engaged on men's work or on special work.

In most of the other metal trades increases have been granted approximating those in the engineering and shipbuilding trades, while in the principal districts manufacturing gold, silver, and electroplate articles an advance of 75 per cent has been given. In the tin-plate industry in South Wales bonuses varying from 50 per cent for the highest paid workers to 115 per cent for those receiving the lowest rates have been paid. Advances for women and girls in these trades vary greatly. In the electroplate industry there was an advance of 75 per cent, while in some other trades the minimum hourly rate was raised.

The average increase on prewar wages in the metal engineering and shipbuilding trades is estimated to be between 100 and 120 per cent.

Textile Trades.

In the cotton trade increases granted to the end of April, 1919, amount to 105 per cent of the prewar rates, while certain classes, as strippers, grinders, and spinners, received additional allowances. In Yorkshire in the woolen and worsted trade the percentage increases vary considerably. Time workers in the spinning and weaving sections and pieceworkers in the worsted spinning section received an increase of 107 per cent with a maximum weekly wage of 32s. 1d.

($7.81). In other branches of the industry the increases vary from 64¼ per cent to 125½ per cent and flat-rate increases of 31s. 1d. ($7.56) for men and 20s. 4d. ($4.95) for women were given in the wool-combing industry in one locality. A reduction in hours from 55½ to 48 was followed by a general advance in hourly rates and piece rates in order to maintain the same weekly earnings.

In the textile bleaching, dyeing, printing, and finishing industries sliding-scale agreements between employers' and workmen's organizations have resulted in adjustments according to cost of living changes, which have averaged practically the same increases in these trades as those given in the woolen and worsted trades. In other branches of textile manufacturing both flat-rate and percentage advances have been made. It is estimated that for the textile trades as a whole the general rise in rates of wages has been 100 to 110 per cent though this is somewhat offset by the fact that in the cotton, linen, and jute industries short-time and unemployment have reduced actual earnings.

Clothing Trades.

In the boot and shoe manufacturing industry rates have been raised from 87 to 93 per cent for skilled men and a minimum of 30s. ($7.30) established for women. Advances in other clothing trades have varied in different localities, but general statistics are not available.

Transport Trades.

Flat-rate wage advances for railway employees in the traffic sections have amounted to 33s. ($8.03) per week for men and half of that for boys, while in the shops advances have been the same as for the engineering trades. Dock laborers have received advances amounting to from 6s. to 8s. ($1.46 to $1.95) a day, while seamen's wages have been raised about 100 per cent with an additional war bonus of £3 ($14.60) per month for those on monthly articles or trading within the war zone. This bonus has been extended for the period covered by the wages act. A shorter week, of 44 hours for dock laborers and 48 hours in transportation enterprises, has been adopted without a reduction in wages.

Agriculture.

Minimum rates of wages for farm laborers have been fixed at from 30s. to 38s. ($7.30 to $9.25) a week (increased May 19, 1919, by 6s. 6d. ($1.58) for all except one district) including the value of certain allowances, such as milk, house, board, and lodging. For

stockmen and special classes higher minimum rates have been fixed. Increases in rates for all classes vary from 83 to 103 per cent with an average of 88 per cent exclusive of the recent general raise.

Other Trades.

Increases in wages granted in the principal industrial centers in the printing and bookbinding trades are from 29s. to 35s. ($7.06 to $8.52) per week; furniture manufacture, 8d. to 10d. (16.2 to 20.3 cents) per hour; pottery (North Staffordshire), 71 per cent; glass-bottle manufacture, 64 per cent; chemical manufacture, 28s. 6d. ($6.93) per week, plus 12½ per cent on earnings; baking and confectionery, 27s. to 33s. ($6.57 to $8.03) per week, and gas and electricity, 28s. 6d. ($6.93) per week, plus 12½ per cent on earnings.

Summary.

It is evident from the instances cited that the amounts of bonuses and increases in rates of wages show a wide variation both in the amounts of the money totals and the percentage increases, the latter ranging from 60 to over 150 per cent. Flat-rate increases have resulted generally in a higher percentage increase for the unskilled workers, while the money equivalent is generally higher for skilled men when the percentage increase has been given.

While it was impossible to fix an accurate average for all classes, it is considered that for manual workers generally wages have more than doubled and the general average increase is considered to lie between 100 and 120 per cent aside from advances of hourly and piece rates, which have been largely offset by reductions in the weekly hours of labor.

Wages of Masters of Vessels in Great Britain.

THE American consul general at London, under date of April 28, 1919, reports the following scale of minimum rates of pay for masters, to be paid by managers of vessels belonging to or in possession of the British Ministry of Shipping:

MINIMUM WAGES OF MASTERS OF VESSELS IN GREAT BRITAIN.

Tonnage (gross tons).	Cargo liners and general trade vessels on monthly articles: Per month.					
	First year.	After 1 year.	After 2 years.	After 3 years.	After 5 years.	After 6 years.
1,000 to 2,000	$165.46	$175.19	$184.93	$194.66	$204.39	.....
2,001 to 3,000	175.19	184.93	194.66	204.39	218.99	.....
3,001 to 5,000	184.93	194.66	.....	.....	.....	.....
5,001 to 7,000	194.66	204.39	214.13	223.86	233.59	.....
7,001 to 9,000	204.39	214.13	223.86	233.59	243.33	.....
9,001 to 12,000	218.99	228.73	238.46	248.19	257.92	.....
Over 12,000	243.33	253.06	262.79	272.52	282.26	(1)
	Coasting cargo steamers on weekly articles: Per week.					
201 to 500	$41.37	$43.80	$46.23	$48.67	$51.10	.....
501 to 1,000	46.23	(2)	48.67	51.10	53.53	.....
1,001 to 2,000	46.23	48.67	51.10	53.53	55.96	.....
2,001 to 3,000	48.67	51.10	53.53	55.96	58.40	(1)

[1] At manager's discretion after 6 years.
[2] The report does not state whether or not the rate for the first year applies also to the second year.

In explanation of the table, the consul general furnishes the following notes:

NOTE 1.—A master's pay under the new scale will be determined as regards service by the period he has held his present post in the same employment as at December 21, 1918.

NOTE 2.—Masters will be entitled to back pay at the rate established by Note 1 for any period of service on articles or continuous employment with the same managers, irrespective of articles, from October 6, 1917, or from the date of appointment as master if subsequent thereto.

NOTE 3.—Special war-risk bonus of $14.60 per month or $2.43 per week, payable from October 7, 1918, is not included in the above rates, and is payable to masters in addition thereto.

NOTE 4.—Masters serving in oil tank vessels will receive in addition 12½ per cent.

Six-Hour Day in Soap-Manufacturing Industry in Great Britain.

AN account of the plan proposed by an English soap manufacturer to reduce the working day to six hours and to pay the workers the same wages as they now receive for 8 or 10 hours' work was given in the MONTHLY LABOR REVIEW for April (pp. 168–173) in a review of Lord Leverhulme's book on The Six-Hour Day and other industrial questions, by Prof. Wm. F. Ogburn, formerly of the University of Washington. The proposal to inaugurate the six-hour working day in the soap manufacturing industry of England was further outlined by Lord Leverhulme at a general meeting of Lever Bros.,

of which he is president, held on March 27, 1919, in the following words:[1]

Now, I come to mention some new developments. The first in importance is the proposed adoption of a six-hour working day. We had intended to do this 12 months ago, but the cutting down of our raw material supplies rendered it impossible. But we have now worked out our scheme, and I may tell you that all the trade unions consulted are most anxious to make the scheme workable and satisfactory, and that the Government, as far as the state of the law will permit, are equally anxious. It is anticipated that the consent of the Home Office will be given to the draft proposals which have now been submitted to them. The general features of the scheme are, first, with regard to day workers and pieceworkers, that we shall work in two shifts—six hours each shift. The morning shift will commence at 7 o'clock, and, after a break of a quarter of an hour from 8.45 for some light refreshment, they will continue to work until 1.15 p. m. At 1.15 the morning-shift work for the day will be over. They will not return to their work until 7 o'clock the next morning. This makes a total of six working hours per day, with 15 minutes break for a meal, for six days in the week, Monday to Saturday included. When we come to consider the afternoon shift, there is a strong feeling and desire to retain the Saturday afternoon half holiday; and to meet this wish the afternoon shift will only work five afternoons, the average being seven hours 12 minutes each afternoon, instead of six afternoons of six hours. Therefore, the afternoon shift will commence at a quarter past 1 (there will be a break of half an hour for refreshment from 4.45 to 5.15 p. m.) and will stop at 9 p. m., but on Friday work will stop a quarter of an hour earlier at 8.45, so that the weekly average is 36 hours. With regard to the shift workers—that is, continuous workers—to divide the 24 hours into four shifts of six hours each instead of three shifts of eight hours each, which is our present working day, would create a difficulty with the night shift. Home life must be considered, and home life requires that a man on the night shift should leave home somewhere about 9.30 or 9.45, so that the household can be closed and all go peacefully to bed at 10 o'clock; and he should not return until 6.15 or 6.30 in the morning, when the household would be up. To insure this will mean a little irregularity in the working. It means that on the night shift a man will work eight hours as at present, starting at 10 p. m. and finishing at 6 a. m.; but this will be balanced by the days when he is only working 5 hours and 20 minutes, and this in a month will give exactly six hours a day, so that one week out of the four a man will be working eight hours at night and the other three weeks he will be working only 5 hours and 20 minutes a day. Of course, the shifts will be changed weekly.

Now, with regard to the light meals. We propose to provide these at the firm's expense, free to the workers. We feel that it will save enormously in timekeeping and actual running, and will simplify the catering. The light refreshments will be tea, coffee, cocoa, bread and butter, and sandwiches, entirely free, at counters adjacent to where the men are working. Neither men, boys, nor girls will require to walk further than is represented by getting out of a railway train and going to the refreshment room. I have tested what you can take at a refreshment room in a quarter of an hour, and I find if I tried I could eat more than is good for me. So that there is ample time for refreshment. The rate of wages will be exactly the same for a 36-hour week as for a 48-hour week. This is obviously essential, but it is equally certain that the staff can accomplish the work without adding any expense to the company by so organizing the carrying on of the work that no increased expenditure will fall on the company. The staff freely recognized in all our discussions that to add to the cost of making soap would be to handicap us not only with firms in the United Kingdom, but

[1] Excerpt from Report on British trade and commerce, by Robert P. Skinner, American consul general at London, furnished this bureau by the State Department.

with firms all over the world whom we meet in competition in the export markets, so that the determination of all of us is that the same wages will be paid and increased leisure obtained without adding to the cost of the article or making prohibitive the expense on the business. As to payment of wages, we want to introduce a different method. Instead of our men crowding around the wage office and waiting their turn, each man should have a little private banking account in a bank near his own house—not the firm's bank, but one of his own selection. We would advise our bank to credit each man from the pay sheet with the amount of money he is entitled to receive for his wages. Under this system a man will draw out of his bank what he wants for his household expenses, and what he does not need will rest in the bank. The amount left as deposit with the bank will be supplemented by an addition from the firm—we are favorably considering this—and this will give a man 5 per cent on his money left in the bank; so that, instead of the money lying at home earning no interest, by adopting this system it will earn interest. Further than that, the tendency will be always to leave a little more each week in the bank; and I feel confident that if we can get this system universally adopted it will not only raise the workingman's position, but add to his dignity, because, instead of crowding around a little pay office, he will be led to become a saver, having money to invest in the business he is engaged in or other businesses.

Wages and Labor Conditions in Argentina.

Shipyards.[1]

AT the end of 1918 the Department of Labor completed an investigation of wages and hours of labor in the shipyards of Buenos Aires. It was found that this industry had largely increased as a result of the war. The work was mainly in the repair of old ships; but notwithstanding the difficulties presented it has been possible to construct new ships of 1,000 tons burden.

This prosperity has been reflected in an increase in wages. The average daily wages in 12 shipyards, not including extra earnings for overtime, holiday, night, and Sunday work for 2,022 persons employed was $6.22 Argentina money.[2] In all but one yard eight hours constituted a day's work. In the yard excepted work was paid for by the hour, and a day's work was fixed at nine hours. Sunday work and overtime was paid at the rate of double time.

The report states that the increase in wages since the war began is equal to 70 per cent. The usual working hours are from 7 to 11 a. m. and 1 to 5 p. m. There has been no unemployment reported in this branch of industry.

The Federation of Naval Construction Workers, organized April 20, 1917, consists of six unions, as follows: Boiler makers, scrapers, naval metal workers, painters and shipyard laborers, calkers, and carpenters and sailmakers.

[1] Cronica Mensual del Departamento Nacional del Trabajo, Buenos Aires, January, 1919.

[2] All money values herein quoted are in Argentina money; the report does not state whether nacional (currency) or oro (gold).

The average daily wages of skilled and ordinary laborers in these various branches are reported as follows:

AVERAGE WAGES OF SHIPYARD EMPLOYEES, BUENOS AIRES, 1918.

Occupation.	Average daily wage of—				Occupation.	Average daily wage of—			
	Skilled labor.	Partly skilled labor.	Ordinary labor.	Apprentices.		Skilled labor.	Partly skilled labor.	Ordinary labor.	Apprentices.
Fitters	$7.12	$6.25	$5.50	$1.50	Blacksmiths	$5.93	$5.57	.....	$2.00
Masons	5.89	.....	5.00	3.00	Tinsmiths	6.08	.....	.....	.....
Sawyers	8.00	.....	4.50	.....	Metal polishers	6.00	.....	.....	.....
Calkers	9.00	[1] 4.50	.....	1.00	Machinists	[4] 8.15	6.50	$4.88	1.90
Boiler makers [2]	7.78	6.48	5.64	2.50	Painters	6.01	[1] 3.00	.....	.....
Carpenters	8.09	5.15	4.83	2.30	Plumbers	8.00	[1] 5.50	.....	.....
Coppersmiths	8.36	6.00	4.97	.....	Autogenous welders	11.00	[1] 5.50	.....	.....
Forgers	7.57	6.50	5.78	[3]	Turners, wood	8.00	7.00	.....	.....
Molders	7.23	5.87	4.86	.....	Turners, metal	6.40	.....	.....	.....

[1] Helpers. [2] Helpers, $5.23. [3] Helpers, $5.30. [4] Helpers, $5.75.

The average wages of supervisors vary from $17.67 per day for boiler makers and $12.75 for machinists to $7 for painters. Among the 2,022 employees for whom the average wages have been determined there were 615 persons classed as ordinary laborers and 72 as apprentices. Sailmakers earned $5.94 per day, pattern makers $7.83, and common shipyard laborers $5.38.

In 15 other classes of establishments in Buenos Aires the number of employees increased from 50,094 in 1917 to 53,724 in February, 1918, while the number of persons employed on tramways decreased from 5,521 to 5,437 during this period.[1]

Wages of Municipal Employees.

The budget for the Federal capital provides:[2] "All municipal employees, whether males or females, over 17 years of age, who receive no other remuneration, rent or food, and have no other paid occupation, shall be paid from January 1, 1919, a minimum wage of $4 per day or $100 per month."

Further data relative to wages in 1917 collected by the department show that the average wages of all employees (53,546) in the various industries in Buenos Aires were as follows: Men (32,583), $3.70 per day; men (9,809), $101.56 per month; women (7,638), $2.26 per day; women (3,516), $70.44 per month; and the average hours worked per day 8 hours and 46 minutes.[3]

[1] Cronica Mensual del Departamento Nacional del Trabajo, Buenos Aires, December, 1918.
[2] Idem, January, 1919.
[3] Idem, February, 1919.

Employment of Minors.[1]

The employment of minors under 16 years of age was greater in 1918 than in any other period since the regulating of such employment became effective. There were 5,586 minors under 16 employed in 1914; 4,093 in 1915; 5,215 in 1916; 6,625 in 1917; and 9,767 in 1918.

The report says the increase shown may be due to an improved inspection service, a greater degree of employment of minors, and the premature closing of the schools in 1918 as a result of the epidemic of influenza. The employment of minors reached its maximum during the months in which the schools were closed. In November, 1918, 1,263 minors obtained permits to work; and in December, 1,931 permits were issued. During the other months the number varied from 515 in June to 818 in January.

Strikes and Labor Disputes.[1]

The effects of the maritime strike became so serious that the executive department issued a decree on February 22, 1919, which authorized the Minister of Public Works and the Minister of Marine to supply through the general office of hydraulic works and the prefecture of ports, to all interested parties who may demand them, laborers necessary to man coastwise ships, launches, and tugboats, and laborers for ballasting and handling cargoes.

Wages, salaries, hours, and extra remunerations for all classes of laborers so furnished are to be the same as is paid like labor by the hydraulic department and the port administration.

All efforts of the national department of labor to have the dispute submitted to arbitration have been fruitless.

This strike followed a demand for an increase of wages; an eight-hour day, both at sea and in port; better hygienic conditions; extra pay for overtime and all recognized holidays; monthly pay days between the first and tenth of the month, and, in port, payment at least 48 hours before the vessel's departure, of wages due at the time; and that no member of the crew shall be required to do any work other than that for which he was specifically employed.[2]

Industrial Accidents.[3]

During the year 1918 there was deposited in the national accident fund $807,024.88 as compensation for industrial accidents, excluding temporary accident compensation paid directly to the injured employee. Of this total, $20,068.94 was for 7 cases of total permanent incapacity, $371,516.55 for 541 cases of partial permanent incapacity, and $415,439.39 for accidents resulting in the death of 123 employees.

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[1] Cronica Mensual del Departamento Nacional del Trabajo, Buenos Aires, February, 1919.
[2] Idem, December, 1919.
[3] Idem, February, 1919.

The average compensation in cases of death was $3,377, for total permanent incapacity $2,867, and for partial permanent incapacity $686.

The amounts deposited with the fund for the three years of the operation of the law, 1916, 1917, and 1918, were $282,771, $416,339, and $807,024, respectively; and the total number of accidents reported in the respective years were 103, 246 and 671.

Eight-hour day in Metal and Mining Industries in France.[1]

REPRESENTATIVES of the metallurgical, mining, mechanical construction, electrical and manufacturing employers' union, and of the Federation of Metal Workers of France have agreed upon the following articles: There shall be an eight-hour day in all of these industries. The employees will adapt themselves to the modern development in machinery and to reasonable methods of work in order that production may early resume its former status and attain the proportions necessary to the general welfare. The employers recognize that in order to maintain and develop production it is expedient to establish piece rates, premiums, and bonuses, and they agree to guarantee a wage based upon production under normal conditions; and if, by reason of the activity and efforts of the employees, production exceeds this base, the employees are assured that their intensified production shall not be considered as a reason for a reduction of wages. The reduction of the hours of labor to eight per day shall not work a decrease in wages. Employees working by the hour shall have compensating increase of hour rates, but changes in piece rates shall be demanded only when such rates, without change in equipment, do not afford, with normal effort, an opportunity to earn the usual wages. Foreign workmen having equal occupational skill as French workmen may be employed when industrial conditions demand it and shall receive equal wages and remunerations. The provision regarding the eight-hour day becomes effective June 1, 1919, in mechanical construction, metallurgy, naval, electrical, and manufacturing establishments. In establishments where operation is continuous, however, and in which special difficulties are encountered in increasing the personnel and in changing machinery, the eight-hour day shall not be established until six months after the signing of the peace treaty. In order to meet these conditions the two organizations agree to make in common the necessary investigations relative to improvement in machinery, recruiting of labor, and needed changes in methods and operations.

[1] La République Française, Paris, Apr. 19, 1919.

MINIMUM WAGE.

Minimum Wage in the Printing Trades in the District of Columbia.

IN the May, 1919, issue of the MONTHLY LABOR REVIEW (pp. 216–219), an account was given of the formation of the Minimum Wage Board of the District of Columbia, its creation of a conference to consider wages for women in the printing trades, and the recommendation of this conference that $15.50 per week should be accepted as the minimum for women experienced in the work, with lower rates for learners. As required by law, the Minimum Wage Board announced a public hearing upon this recommendation, at which anyone wishing to protest would have full opportunity. The hearing was held June 13, 1919, and on the whole, very little opposition to the rate was manifested. Several employers urged, however, that temporary exceptions ought to be made in the case of firms working on contracts which had been figured on the basis of the wages hitherto prevailing. "One company was cited as very likely to lose $20,000 on its contract, which has two years yet to run, to print a magazine for a well-known national society."

The members of the board were unwilling to make exceptions, because of the confusion which would be thus created, and the consequent difficulty of enforcing the law. They suggested that the holders of such contracts would undoubtedly consent to a modification of terms in view of the different situation brought about by the wage award. After full discussion the recommendations of the conference were confirmed without making any exceptions, in the following order, dated June 13, 1919:[1]

To whom it may concern:

TAKE NOTICE.—That pursuant to and by virtue of the authority vested in it by act of Congress (Public, No. 215, 65th Cong.) and after public hearing duly held in Washington, D. C., on Friday, June 13, 1919,

The Minimum Wage Board of the District of Columbia does hereby order that—

1. No person, firm, association, or corporation shall employ an experienced female, irrespective of age, in the printing, publishing, or allied industries at a weekly wage of less than $15.50, any lesser wage being hereby declared inadequate to supply the necessary cost of living to female workers in such industries and to maintain them in health and to protect their morals.

[1] M. W. B. Order No. 2, Printing, publishing, and allied industries.

2. The term "experienced female," as used in this order, means one who has been employed in these industries one year or more.

3. The weekly wage for learners may be less than the wage for experienced workers provided that:

(*a*) Learners shall be paid a weekly wage of not less than $8 for the first three months of employment, of not less than $9 for the second three months of employment, of not less than $11 for the third three months of employment, of not less than $12 for the following three months of employment, and thereafter shall be considered experienced workers, and shall be paid not less than the minimum wage prescribed for experienced workers.

(*b*) All learners shall be registered with the board not later than three days from the date their employment begins and it shall be the duty of the employer to require a certificate of such registration and the learner shall apply in person to the board for such certificate. Pending the receipt of this certificate the learner shall be paid not less than the minimum rate for the wage group in which she belongs.

4. The total number of female learners in any establishment shall not exceed one to every four experienced females employed, provided that in establishments where less than four females are employed one learner's certificate of registration shall be valid. It is further provided that if, after making reasonable efforts, an employer is unable to secure all the experienced workers needed, he may, after first notifying the Minimum Wage Board, employ such inexperienced females as may be necessary, provided that within two days thereafter he file with the board a written statement showing the efforts made by him to obtain experienced workers, the reasons for his inability to do so and a record giving the name, residence, length of experience in this kind of work and wage of each inexperienced female so employed.

5. All females now employed in the printing, publishing, and allied industries shall be rated and paid in accordance with their period of employment at not less than the rates specified for such period in section 3a.

6. A license may be issued by the board to a woman whose earning capacity has been impaired by age or otherwise authorizing her employment at a rate less than the minimum, such special rate to be fixed by the board.

7. The board shall have jurisdiction over all questions arising as to the administration and interpretation of this order.

8. The term "printing, publishing, and allied industries" shall include printing, publishing, bookbinding, engraving, lithographing, multigraphing, duplicating, addressographing, and similar processes connected with these industries.

This order shall become effective 60 days from date hereof, to wit, August 13, 1919.

In accordance with sections 12 and 18 of the District of Columbia minimum wage law (Public, No. 215, 65th Cong.) after this order becomes effective it shall be unlawful for any employer affected hereby to fail to observe and comply herewith, and any person who violates this order shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not less than $25 nor more than $100, or by imprisonment for not less than 10 days nor more than three months, or by both such fine and imprisonment.

MINIMUM WAGE BOARD OF THE DISTRICT OF COLUMBIA.

NOTICE.—Your attention is respectfully called to section 12, Public, No. 215, Sixty-fifth Congress, which provides that every employer affected by this order shall keep a copy posted in a conspicuous place in each room in his establishment in which female workers are employed.

To facilitate the enforcement of the law, the Minimum Wage Board prescribes the keeping of certain records, as set forth in the following order, dated June 13, 1919:[1]

[1] M. W. B. Order No. 1, employer's record.

To whom it may concern:

TAKE NOTICE.—That pursuant to the authority in it vested by act of Congress (Public, No. 215, 65th Cong.) and in accordance with the determination by it to-day duly made and rendered,

The Minimum Wage Board of the District of Columbia does hereby order that—

Every person, firm, association, or corporation who employs women or minors within the District of Columbia shall keep a record containing the following information concerning each such employee:

1. Name (in full, with designation Miss or Mrs.).
2. Address.
3. Age: Adult or minor (if minor, give exact age).
4. Date at which employed.
5. Wage at which first employed.
6. Hours worked per day and per week.
7. Length of experience in present kind of work.

This order shall become effective August 1, 1919.

In accordance with sections 12 and 18 of the District of Columbia minimum wage law (Public, No. 215, 65th Cong.) after this order becomes effective, it shall be unlawful for any employer affected hereby to fail to observe and comply herewith, and any person who violates this order shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than $25 nor more than $100, or by imprisonment for not less than 10 days nor more than 3 months, or by both such fine and imprisonment.

MINIMUM WAGE BOARD OF THE DISTRICT OF COLUMBIA.

NOTICE.—The term "woman" includes only a woman of 18 years of age or over; the term "minor" means a person of either sex under the age of 18 years (sec. 1, Public, No. 215, 65th Cong.).

At present a conference appointed by the Minimum Wage Board is working upon the question of a minimum wage for women in retail stores. Its report, with recommendations, is expected within a few weeks. Apart from this, the board is carrying on an investigation into wages in hotels and restaurants, with a view to appointing a committee to determine a minimum wage for such work should prevailing rates be found low.

WOMEN IN INDUSTRY.

Model Contract of Employment for Domestic Service in Berlin.

ONE of the first legislative acts of the new Government in Germany was the abrogation of the existing oppressive laws regulating domestic service. The abolition of these special laws has made it necessary to find something to fill the gap. In Berlin, in connection with the municipal employment exchange, a board (*Kuratorium*) has been established, consisting of representatives of housewives' and domestic servants' associations. This board has drawn up a model form of domestic service contract to be signed by both parties before an engagement is concluded.[1] The following are the chief points in the model:

It states exactly the kind of work to be done, the number of persons in the household, the number of rooms, and the number of floors in the house, and provides that remuneration will include lodging, adequate board, and a monthly wage of —— marks, to be paid on the last day of each month. (For a beginner a minimum wage of 15 marks ($3.57) per month plus 5 marks ($1.19) high-cost-of-living bonus is proposed. The domestic servant must be registered with the proper local sick fund and the legal deductions must be made from the pay for invalidity and sickness insurance.)

The contract specifies in detail whether washing, carpet beating, coal carrying, window washing, floor polishing, etc., is to be done. Information as to the servant's household experience and education and training is asked.

The door of the room assigned to the servant must be provided with a lock and key, and the room must have a bed for his or her exclusive use, a window opening into the outer air, a wardrobe, washing appliances, and a towel. There must also be means for heating the room. Where heat can not be provided during the present period of transition, another heated room must be available for the servant during his or her spare time.

Where there is a bathroom in the house, the servants must be permitted to use it or else they must be granted time and money to have one bath per week outside.

[1] Soziale Praxis und Archiv für Volkswohlfahrt, vol. 28, No. 20. Berlin, Feb. 13, 1919, pp. 330 ff.

The daily period during which the servant must be at call shall be as a rule 13 hours, of which 2 hours shall be free for meals and other purposes. After 7 p. m. the servant shall only be liable to perform current work such as getting supper, preparing bedrooms, opening the door, etc. Washing, ironing, scouring, etc., are not to be undertaken after that time. Any work done after 8 p. m. on account of visitors or parties must be paid for extra, the overtime rate to be 50 pfennigs (11.9 cents) an hour for work done up to 10 p. m., and 75 pfennigs (17.9 cents) per hour for work done after 10 p. m.

In case of sudden cases of illness of a noninfectious nature in the household the servant must be ready to perform work outside of the regular working hours. The servant may, however, decline to care for and attend a person afflicted with an infectious disease and to clean the utensils required for his care.

The servant shall be given leave every other Sunday after 3 p. m., and each week one free afternoon of at least 4 hours after 4 p. m. shall be allowed.

The servant shall not leave the house without notifying the employer. Girls under 18 years of age must return on week days not later than 10 p. m. and Sundays on which they have leave at a time to be agreed on. For adults, the hours of return on week days is left to agreement with the employer.

No deductions shall be made for household utensils accidentally broken.

After one year's service the servant shall be entitled to at least one week's leave with full pay and suitable allowance for board. This leave is to increase by one week for every two years' additional service up to a maximum of three weeks.

Two weeks' notice shall be given on leaving the service or on discharge.

Instead of the service pass book hitherto prescribed testimonials are to be produced by the servant if required to do so. These shall be returned when the servant begins work.

If disputes arise while the contract is in force, they are to be settled by an arbitration board consisting of an equal number of representatives of housewives and servants.

INDUSTRIAL ACCIDENTS AND HYGIENE.

Occupational Diseases in Pennsylvania.[1]

By ALICE HAMILTON, M. D.

PENNSYLVANIA is probably the most important industrial State in the Union. Certainly to the student of occupational diseases it is much the most important, for no other State has so wide a variety of those industrial processes which carry with them danger to the workers either because of poison in the form of fumes, liquids, or dusts, or because of mechanically irritating dusts which injure the throat and lungs.

It would be impossible to describe in detail all the dangerous trades of Pennsylvania, impossible to more than mention those which are not classed as dangerous but which are known to have a sickness rate higher than the average for industry. Lead poisoning usually comes first in order, since it is considered by far the most important of the industrial poisons.

Lead Poisoning.

A great deal of lead work is done in Pennsylvania. In the Pittsburg region much molten lead is used in making machine parts and castings, plumbers' goods, in tempering steel, and in manufacturing lead pipe, sheet lead, and wire; lead compounds are used in enameling sanitary ware and in grinding paint; white lead is corroded and oxides are roasted. The Philadelphia region has large white-lead works and oxide roasters, and paint factories. Lead oxides are used in large quantities in the manufacture of storage batteries in Philadelphia, and the shipyards use great quantities of white lead and red lead paint. In several parts of the State tile works use a lead glaze, and there are many brass foundries and factories in which lead poisoning occurs because of the presence of lead as an impurity in the brass. There are also factories in which molten lead is used—type metal, solder, babbitt. Rubber works use lead salts in compounding, and small refineries work up lead scrap, dross, and lead refuse of all kinds.

No figures are available in Pennsylvania, or for that matter in any State, to show how much lead poisoning occurs in any of these industries. Studies made for the Federal Bureau of Labor Statistics

[1] From the report of the Health Insurance Commission of the General Assembly of the Commonwealth of Pennsylvania, January, 1919. 317 typewritten pages.

have provided us with information concerning the chief lead industries throughout the country, and at the time the studies were made the Pennsylvania plants did not differ in any important respect from those in the other States included in the investigations, nor was there any reason to suppose that there was less lead poisoning in them than in those of other States. The publications of the bureau show that in 1910–11 the white-lead industry had a rate of about 18 per cent yearly of lead poisoning. In enameling sanitary ware the yearly rate in 1911 was 21.4 per cent, and in glazing tiles the rate during the same year was 13.9 per cent. In the smelting and refining of lead there was a little over 22 per cent of lead poisoning in 1912. Making storage batteries caused lead poisoning in almost 18 per cent of all those employed in 1913.

Since these figures were compiled certain of the lead industries in Pennsylvania, notably the making of white lead and of lead oxides and the making of storage batteries, have improved greatly and now undoubtedly have a much lower rate of poisoning. Not so much improvement has taken place in other lead trades; indeed it is doubtful whether there is much less plumbism in the smaller refineries and in the establishments using solder and casting lead than there was before general attention was called to this kind of danger to workmen. The notoriously dangerous lead trades have been made much safer, the less dangerous ones have hardly changed at all, and hospital records that used to carry many cases from white-lead works and storage-battery works get the greater number of their cases from among solderers, lead burners, type founders, and makers of tin cans.

Printers and painters are too numerous for any complete investigation concerning their rate of lead poisoning. Both are notoriously unhealthy lead trades, the latter much more so than the former. The printing trade has always had more than its share of ill health, but it is impossible to be sure just how much is due to the presence of lead and how much to the fact that it is an indoor trade involving little muscular effort and much nervous strain. In the course of an investigation made for the Bureau of Labor Statistics it was found that out of 200 working printers, 100 in Chicago and 100 in Boston had 18 or 19 per cent lead poisoning. It is not clearly defined lead poisoning, however, that causes most of the ill health among printers, rather the lead acts in lowering the resistance to tuberculosis and in encouraging the progress of the so-called "old age" or degenerative diseases, Bright's, heart disease, and general arteriosclerosis. Of late years the printers have succeeded in lowering their tuberculosis rate and in adding to the average duration of life, but an increasingly large number are now suffering from old-age diseases during the middle years of life.

The most severe and crippling forms of lead poisoning are found among painters, for this is a skilled industry and men do not drop it easily even if they know it is ruining their health. The examination of 100 painters in Chicago in 1913 showed that not fewer than 59 of them were suffering from some form of plumbism. If the same proportion holds good among the 14,000 journeymen painters in the State of Pennsylvania, there must be some 8,000 whose health is somewhat impaired as a result of their work. Lead-poisoned painters often have very serious forms of plumbism. Among 100 lead-poisoned painters in Chicago, there were 42 cases of palsy, 9 cases of brain disease, 11 cases of impaired sight, and 11 of general hardening of the arteries. Painters are exposed to other injurious substances besides lead, to the benzine or naphtha in quick-drying paints, to benzol in coal-tar paints, to turpentine, wood alcohol, carbon tetrachloride and to carbon monoxide gas which rises from the charcoal stoves placed in new buildings to dry out the walls.

Painting in factories may be either much less dangerous than house and ship painting or rather more so. Instances of the safe branches are the painting of machinery and vehicles with leadless paints by dipping them into vats of paint. Instances of the dangerous forms are the painting and sandpapering of wheels and bodies of automobiles and carriages where a paint rich in lead is used. The most dangerous work for the journeyman painters is interior decorating of houses, requiring many coats of white lead paint which must be sanded down, and ship painting where great quantities of white and red lead paints are used. Ship painting employs a large number of painters in Pennsylvania.

From records of hospitals in Philadelphia and Pittsburg the following industries were shown to have caused lead poisoning severe enough to require hospital treatment. The well-known lead industries are not included here.

Grinding lead enamel for sanitary ware.
Sanitary ware enameling.
Lead tempering.
Lead casting.
Sweeping up scrap and dross from lead casting.
Unloading lead bullion from cars.
Plumbing trade.
Making lead stoppers and perforated filters for washstands.
Pouring brass.
Polishing brass.
Making tinware.
Soldering tincans.
Chipping off old red lead paint.

Carbon Monoxide.

Carbon monoxide is probably the closest rival of lead as an occupational poison. Carbon monoxide poisoning is yearly on the increase as the use of producer gas for heat and power increases and as the automobile industry increases. All incomplete combustion of gas is accompanied by the production of carbon monoxide, but the gas is found more especially in the steel foundries, in smelters, brick kilns, enameling furnaces, bakeries, laundries, and in coke by-products works. In testing automobiles many cases of carbon monoxide poisoning have occurred through the escape of exhaust gases, which are composed largely of this compound. Acute carbon monoxide poisoning is far from rare in the great steel mills of the Pittsburg region. It causes dizziness, weakness, confusion, or rapid loss of consciousness, which may end in death in a very short time. If the man recovers from an attack there may be a more or less permanent loss of memory and mental powers, or pneumonia may develop, which is very likely to be fatal. Cases of chronic carbon monoxide poisoning is found among steel workers and also among pressers in tailor shops and among tailors who work in the same room with them, among printers working in shops where gas is used to keep lead melted and there are no pipes to carry off the fumes, among bakers who are exposed to gas fumes, and among solderers of cans who use the heat of naked gas jets. This chronic poisoning causes an increasing anemia, with all its consequences, loss of nutrition, loss of strength, nervousness, indigestion, and a tendency to infectious disease, especially tuberculosis.

Brass.

The metallic poisons which are used in Pennsylvania industries are brass (an alloy of copper and zinc), mercury, arsenic, and antimony. Brass poisoning as often described is really lead poisoning, for brass polishers and buffers do not become poisoned by the solid brass; if they are poisoned it is from the lead so often present in the alloy. Real brass poisoning is met with in brass founding or pouring, when the thick white fumes given off are allowed to escape and contaminate the air of the room. The sublimed zinc oxide is the element in these fumes that gives trouble, not any form of copper, and zinc smelters suffer from the same kind of symptoms as do zinc welders. Brass founders' ague, as it is called, is not considered a serious affection by either physicians or the workmen themselves. It resembles a short attack of chills and fever, but clears up rapidly. Nevertheless, brass workers do not have as good health as the average of men employed in manual work. Probably this is the result of exposure not only

to brass but to lead and sometimes arsenic, to heat, abrupt changes of temperature, heavy work, and to carbon monoxide from the furnaces.

Mercury.

Mercury is used chiefly in the making of felt hats, a fairly large industry in this State. The rabbit fur used for felting is treated with nitrate of mercury and all who handle it after this preliminary "carrotting" are liable to mercurial poisoning. The felt hat industry is notoriously unhealthful all over the civilized world. In addition to the presence of so powerful a poison as mercury there is the irritating effect on the lungs of the particles of fur in the air, the atmosphere of steam in certain departments, and the wood alcohol used in shellacking the felt. This industry has more cases of industrial wood alcohol poisoning than has any other trade.

Arsenic.

Arsenic is present as an impurity in much iron, zinc, and lead ore and also in much of the muriatic and sulphuric acid used in industry. When such an acid is brought in contact with such a metal, arsenic in the form of arseniureted hydrogen is given off and poisons the workman. Lead burners become poisoned by the hydrogen which they use for their oxyhydrogen flame and which they make from muriatic acid and zinc and makers of toy balloons by the hydrogen used to fill the balloons. Such cases are seldom rightly diagnosed, for there is nothing in the industry to suggest arsenic to the physician. The making of arsenical insecticides is not carried on in Pennsylvania.

Various Industrial Gases.

Gaseous poisons less important than carbon monoxide are sulphur dioxide, nitrogen oxides, chlorine, ammonia, and ether. Sulphur dioxide is believed by many practical men to be devoid of real danger, yet it was one of the poisons that Germans selected for experiment when they inaugurated gas warfare. It is given off chiefly in the making of sulphuric acid and in the making of carbolic acid, both of them carried on in this State. Chlorine is given off during the early stages of nitric acid manufacture. It is the gas that was used almost exclusively during the first year of gas warfare. Ammonia gas may cause so much irritation of the respiratory tract as to set up a fatal pneumonia. It is used in refrigerating plants and in the making of artificial ice, and to a less extent in making ammonium nitrate for the explosive industry.

Nitrogen oxides are a danger wherever nitric acid is made or used. The manufacture of nitric acid has increased enormously since the

war and so has its use in the making of explosives, all of which are nitrated products. There is nothing in the making or use of nitric acid that requires the escape of nitrous fumes. On the contrary, every effort should be made to prevent their escape in the interests of economy as well as to protect the workmen. Of recent years the handling of this dangerous acid has greatly improved and there is much less "fume poisoning" in nitric acid works and in the making of picric acid, nitro-cotton, trinitrotoluol, and celluloid than there was three years ago. Nevertheless it is impossible to prevent altogether the leaking of pipes or vats, for strong nitric acid is very corrosive, and there is still some poisoning from this gas among workers in Pennsylvania acid plants and in explosives manufacture.

Coal Tar Products.

Since the beginning of the war, when supplies from Germany were shut off, there has been a great increase in Pennsylvania of industries involving exposure to coal tar products. Formerly a certain amount of benzol was imported from Germany but it was costly and did not find extensive use. The petroleum derivatives, naphtha and benzine, were cheaper and more abundant and they were used largely in rubber manufacture, in making quick-drying paints, paint removers, varnishes, shellacs, and so on. Benzol is said to be a better solvent than naphtha, but it was too expensive. Since the war benzol has been manufactured on a large scale in this country and some of the largest plants are in Pennsylvania. This benzol is used not only for its solvent properties but as a starting point for the manufacture of anilin. The latter is then used to make anilin dyes and also in compounding rubber, making type roller cleaners, shoe polishes, and one of the high explosives, tetryl.

Closely related to benzol is toluol, extracted from illuminating gas and latterly used in large quantities to make the charge for high-explosive shells—trinitrotoluol, commonly called TNT. Pennsylvania has not only important plants for the nitration of toluol and the purification of crude TNT, but also at least one large shell-loading plant where the TNT is made into charges and loaded into shells, and also one in which detonators are made from TNT and tetryl. Benzol and toluol and their derivatives are all poisons to the blood and to the nervous system, being absorbed largely through the skin. Benzol is the one most rapidly poisonous, a short exposure to heavy fumes being frequently fatal. Anilin is volatile and has a rapid effect but is not so serious a poison as TNT, which is more slowly absorbed, and for that very reason has a more profound effect, because it does not give prompt warning of danger as does anilin. Tetryl is, so far as is known, only slightly poisonous, producing an

eruption on the skin which is distressing but not dangerous. Toluol is like benzol in its effects. The extraction of benzol from coal tar in Pennsylvania has been followed by several fatal cases of benzol poisoning.

The substitution of benzol for naphtha and benzine means that work in rubber manufacture, in making and using shellacs and varnishes, using varnish removers and paint removers, using rubber cement for sealing cans, and dry cleaning and dyeing, are probably more dangerous occupations now than they used to be. Benzol is also used in another new industry, the manufacture of carbolic acid. Chronic benzol poisoning is not as yet very easy to recognize, but investigations now being made on the blood of benzol workers will probably make it easier to discover whether the ill health, the anemia, loss of strength, nervous symptoms, and sometimes gastric symptoms, found among those who work with benzol, are caused by the benzol or by other factors.

Disease Caused by Physical Agents.

There is a fairly full list of occupational poisons used in Pennsylvania, but though they cause a good deal of industrial sickness they are not by any means so important as are certain other disease-producing factors in the industry in this State. One of the most important, if not the most important industry in Pennsylvania, is the manufacture of steel. No thorough study has ever been made of the occupational diseases of Pennsylvania steel workers, but we know that there are many things about the making of steel which are harmful to health. Steel workers are exposed to poisoning not only by carbon monoxide but sometimes also by lead, arsenic, sulphureted hydrogen, and the cyanides. They must use great physical strength, and if the strain is too great for the heart there may be an acute dilatation which may be slow in recovery or may be permanent. Steel workers are also exposed to metallic dust and to sand, to great heat, to sudden changes of temperature, resulting in rheumatism, lumbago, or bronchitis; and to light of such character and intensity as to injure the eyes if they are not protected. To all these injurious features must be added the fatigue of the long workday and the seven-day week.

Textile Industry.

Another very important industry in Pennsylvania is the textile, which is regarded as unhealthful in all civilized countries. The bad features in the textiles trades are, first, the light fluffy dust of cotton, or wool, more rarely flax; the fatigue caused by the noise, jarring, and

monotonous work which yet demands constant attention; the heat and humidity. These, together with a rather low wage scale, are all factors that go to bring about an abnormally high rate of tuberculosis in the textile trades. The more immature the workers, the more tuberculosis, and the more fatiguing the work, the more tuberculosis. Many girls between the ages of 16 and 24 are employed in the mills in and around Philadelphia and it is just in this age group that the incidence of industrial tuberculosis is heaviest.

Coal Mining.

Another important industry in Pennsylvania is coal mining. Coal miners have a high accident rate and that fact affects their sickness rate. Accidents usually kill off or incapacitate men in the earlier age groups, the very groups in which tuberculosis is usually most prevalent. It is well known that coal miners do not have as much pulmonary tuberculosis as does the population at large and because of this fact is a general impression that the coal mining industry is unusually healthful. Coal miners more than make up for their low tuberculosis rate by their high rate of deaths from other respiratory diseases. This is shown by a recent analysis made of the mortality of the two coal-mining cities of Scranton and Wilkes-Barre compared with the mortality for the whole State of Pennsylvania. The reason for the excessively high death rate from nontuberculous respiratory diseases is usually given as follows: Coal dust is not very irritating and does not cause the sort of injury to the lung tissue which is caused by steel or stone dust and which prepares the way for a tuberculous inflammation. The effect of coal dust is to cause a very slow hardening of the lung, which may produce no symptoms or may cause asthma. If, however, the miner contracts pneumonia, the hardened state of his lungs diminishes very much his chance of recovery.

COMPARATIVE MORTALITY IN PENNSYLVANIA, 1911 TO 1915.

[Rate per 100,000 population.]

Cause of death.	Scranton.	Wilkes-Barre.	Remainder of State.
Pulmonary tuberculosis	79.9	74.9	110.5
Other tuberculosis	16.6	19.4	16.4
Respiratory diseases	261.2	212.5	184.2
Violence	153.5	179.7	98.9

Anthrax.

Pennsylvania, having an important port of entry at Philadelphia, has had a comparatively large number of cases of that rather unusual industrial disease, anthrax or malignant pustule. Anthrax is caused by a very resistant bacillus which sets up a fatal disease in cattle. It is especially in hides that are shipped to this country from abroad that this infection is found. Even careful disinfection before shipping is not always enough to kill the germ of anthrax, which may retain its vitality and weeks later infect the man who unloads the hides or sorts them or carries them through the processes of washing and tanning.

Between January 1, 1913, and January 1, 1916, there were 49 cases of anthrax in Pennsylvania, eight of them women. Seven of the 27 cases reported during the first half of this period are known to have been fatal. Out of 132 deaths from anthrax reported throughout the registration area of the United States in a period of five years, 1910–1915, 13 occurred in Pennsylvania.

The women who contracted anthrax were sorting hair and twisting hair or were working in tanneries; the men had occupations of great variety. They were hide and skin workers, wool and hair workers, longshoremen unloading hides, laborers in tanneries, and there was one representative of each of the following occupations: Inspecting raw stock, sorting raw hides, fixing a haircloth loom, handling dirty rags for shoddy, handling hoofs in a glue factory, examining haircloth, making brushes, working in a livery stable. In addition there were two babies, one the child of a tanner, the other the child of a coal miner, apparently infected from some unknown source.

Conclusions.

There is no compensation for occupational disease in Pennsylvania. In this respect some States are more fortunate, but it would be a great mistake to think that the passage of the law providing compensation for occupational diseases would do away with the poverty that is really attributable to sickness set up by or increased by the workers' occupation. It is true that we are learning each year more about the action of various poisons on the human body and also about such indirect factors in the cause of disease as fatigue, heat, and humidity. Nevertheless we can connect occupational disease only in a small number of cases with that degree of positiveness that would be required under the law. It is only when the disease is caused by a poison whose symptoms are unmistakable or by acute infection with a germ that can be identified, or when it is caused by some physical agent, such as excessive heat or the pressure of air in a caisson, that we can actually prove the occupation to be responsible.

Nobody has any difficulty in deciding that lead colic or lead convulsions in a white-lead worker should be charged up to his occupation, but it is a very different thing to prove that a general hardening of the arteries, with Bright's disease and perhaps softening of the brain, in a lead caster who has never had lead colic, is caused by his occupation. Always there is far more doubt about the occupational actor when the poisoning is chronic than when it is acute, and yet industrial poisoning is typically chronic, exceptionally acute. There have been some very startling cases of acute benzol poisoning in Pennsylvania that attracted attention, were investigated by the State authorities, and were made the ground for orders tending to prevent such accidents in the future. But for every case of that kind there are probably twenty or more of slow, chronic poisoning with benzol in rubber works, in canneries, in straw hat manufacture, when rosin in benzol is used for sealing cans, and in cleaning and drying. In the great rolling mills around Pittsburg, every now and then a foundryman is overcome with the fumes of carbon monoxide, rendered unconscious, perhaps, and on recovery of his senses he is confused and mentally unsound for some time, or he contracts pneumonia within a short time. Such a case is undoubtedly occupational, and nobody thinks of questioning it. But for every case of so-called "gassing" in the mills there are probably a hundred cases of anemia and malnutrition and neurasthenic troubles among pressers in tailor shops, bakers, metal casters, linotypists, and electrotypers, all of whom work day after day in air slightly contaminated by the fumes of carbon monoxide from naked gas burners. So, also, a case of anthrax in a tannery worker, which develops into fatal blood poisoning, is recognized as occupational, but tuberculosis developing slowly in a sandblaster of sanitary ware is not so recognized.

Many other instances could be cited to show that while acute industrial poisoning can be readily recognized, chronic poisoning constitutes a much harder problem, but even more difficult is the problem when we try to trace the connection between occupation and disease in those trades where dust is the danger, dust that is not poisonous or perhaps only slightly so. Felt hat makers have a high tuberculosis rate, and the injurious effect of the fine particles of fur in the air they breathe is doubtless increased by the presence of the mercurial salt with which the fur has been treated, but if a hat maker shows no symptom of mercurial poisoning, only of consumption, it is not easy to prove that he contracted the disease in the course of his work. The same difficulty is seen in occupations where metallic lead dust is present. We know that lead poisoning and tuberculosis go hand in hand, and that a lead trade in which men remain for many years always has a high tuberculosis rate, but if a

consumptive printer does not give a history of lead colic, how are we to prove that his occupation has brought on his disease.

The dusty trades, undoubtedly responsible for more disease than any other class of occupations, because they employ so many more people than do the notoriously dangerous trades, are not adequately covered in any State by the laws designed to prevent disease or to compensate workmen suffering from disease contracted in the line of his work, for the reason that it is extremely difficult to prove the responsibility of the occupation. The dust that causes the harm is not the coarse, heavy dust that is easily seen and that the factory inspector can insist on having done away with. Such dust can not reach the lungs and injure them. It is the fine, almost invisible particles that do the real harm, because they pass in with the breath and are carried down to the lungs. The commonest form of injury caused by dust is a slowly developing fibrous change in the lungs, which may become the seat of tuberculosis if anything happens to lower the worker's vitality, or which may prevent his recovery if he contracts pneumonia. Obviously, no matter how positive we may feel that such results can follow long exposure to fine atmospheric dust, we shall always find it difficult to prove that any individual case of consumption or of death from pneumonia was caused by a dusty occupation. This means that no law, no matter how wide its application, will ever cover all cases of occupational disease.

Government Regulations to Prevent Danger of Anthrax.

ONE of the chief dangers to workmen in the handling of hides, skins, hair, wool, etc., is anthrax infection which may result from contact with any one of these animal by-products. Anthrax has been recognized as an occupational disease which in recent years has claimed a goodly number of victims in this country. To be inoculated with the anthrax infection does not necessarily mean death, but the consequences of such inoculation are so serious that protective measures have come to be regarded as highly desirable. To this end a study was made by a special departmental committee in England to determine the extent of the anthrax menace and to devise some effective method of disinfection that would render the hides and other animal by-products free from the deadly spores. The committee recommended a method of disinfection which was noted in the MONTHLY LABOR REVIEW for August, 1918 (pp. 205–208).

In our own country the Department of Agriculture and the Treasury Department have given attention to the matter, and on October

15, 1917, issued a joint order (No. 2), effective January 1, 1918, giving regulations governing the sanitary handling and control of hides, sheepskins, goatskins and parts thereof, hair, wool, and other animal by-products offered for entry into the United States. Regulations I, II, and V, relating to hides and skins, and wool and hair, are as follows:

Regulation I.

Hides and skins.

SECTION 1. All hides of neat cattle, calfskins, buffalo hides, sheepskins, goatskins, and deerskins offered for entry into the United States (except abattoir and hard, sun-dried hides and skins as hereinafter provided for), may be imported from any country maintaining an efficient veterinary inspection system, when accompanied by a certificate signed by an official veterinary inspector of such country, or, in the absence of such official veterinary inspector, by a United States consular officer, stating that anthrax is not prevalent and that neither foot-and-mouth disease nor rinderpest exists in the locality in which the hides or skins originated. Those articles may also be imported from any country which does not maintain an official veterinary inspection system when accompanied by a United States consular certificate stating that anthrax is not prevalent, and that neither foot-and-mouth disease nor rinderpest exists in the locality in which the hides or skins originated. In lieu of a certificate showing the nonprevalence of anthrax and the nonexistence of foot-and-mouth disease and rinderpest, a certificate signed by one of the aforementioned officials stating that the hides of skins have been disinfected under his supervision by any of the methods approved or which may hereafter be approved by the Chief of the Bureau of Animal Industry, will be accepted.

SEC. 2. All hides or skins offered for entry into the United States (except abattoir and hard, sun-dried hides and skins as hereinafter provided for) which are not accompanied by any of the certificates prescribed in section 1 of this regulation, or which are accompanied by certificates which do not comply with the requirements or purposes of these regulations, may be imported from any country upon the conditions that they will be consigned from port of entry to an establishment having proper facilities for their sanitary control and disinfection; that they will move from port of entry to the establishment in cars or approved containers, sealed either with customs seals or seals of the Department of Agriculture; that they will be handled at port of entry and en route to such establishment in accordance with the provisions of these regulations, and that they will be disinfected by one of the methods approved, or which may hereafter be approved, by the Chief of the Bureau of Animal Industry. Seals of the Department of Agriculture shall be affixed to said cars and containers only by inspectors of the Bureau of Animal Industry, or by customs officers, and may be broken only by inspectors of the Bureau of Animal Industry, by customs officers, or by other persons authorized so to do by the Bureau of Animal Industry. Customs seals shall in no case be broken except by customs officers.

Regulation II.

Hard, sun-dried hides and skins, and abattoir hides and skins.

SECTION 1. Hard, sun-dried hides and skins may be imported without disinfection if certified as required in section 1 of Regulation I to be from a locality where anthrax is not prevalent, if the bales or hides are distinctly marked for identification, each shipment showing invoice number, names and addresses of consignee and consignor,

as such hard, sun-dried hides and skins so certified showing freedom from anthrax can be considered as having been disinfected by the process of curing and need not be submitted to any further treatment. Hard, sun-dried hides or skins may be imported without being certified to be from a locality where anthrax is not prevalent, upon the conditions prescribed in section 2, Regulation I, for the importation of uncertified hides and skins.

SEC. 2. Abattoir hides and skins taken from animals slaughtered in Sweden, Norway, Denmark, Australia, New Zealand, Great Britain, Uruguay, Argentina, Brazil, and Venezuela when accompanied by a certificate of an official veterinarian of the country where such animals were slaughtered, showing that such hides or skins were taken from animals free from disease at the time of slaughter, may be imported into the United States without disinfection. Abattoir hides and skins from the countries specified which are uncertified, and abattoir hides and skins from countries other than those specified, may be imported subject to the requirements of Regulation I.

Regulation V.

Wool and Hair.

SECTION 1. Raw wool or hair clipped from healthy live animals, scoured wool and hair, and noils of wool and hair which have been properly scoured may be imported without disinfection or certification.

SEC. 2. Picked or pulled wool or hair, when accompanied by an affidavit of the exporter designating the bales or packages thereof by their markings, indicating the consignor, consignee, and number of the invoice, and stating that all the wool or hair contained in the bales or packages came from animals free from anthrax, may be imported upon the conditions that the consignee or owner of the wool or hair, or his agent, files a satisfactory bond or agreement assuring proper facilities of disinfection at the establishment to which the shipment is consigned and that such wool or hair will be disinfected by proper exposure to a temperature of not less than 165° F. prior to any transfer or reshipment from such establishment. If such wool or hair is unaccompanied by the above-mentioned affidavit it may be imported upon condition that the consignee or owner thereof or his agent files a satisfactory bond or agreement assuring proper facilities for disinfection at the establishment to which the shipment is consigned and that all of such wool or hair will be disinfected by proper exposure to a temperature of not less than 200° F. for at least 15 minutes prior to any transfer or reshipment from such establishment.

SEC. 3. Importation of abattoir pulled wool will be permitted without restrictions from any country maintaining an efficient veterinary inspection system, when accompanied by a certificate signed by an official veterinary inspector of such country, or, in the absence of such official veterinary inspector, by a certificate of a United States consular officer of the locality from which shipped to the effect that said wool was procured from sheep slaughtered therein and passed under Government inspection, and that in the process of wet pulling and drying it has been subjected to a temperature of not less than 165° F. Such certificate shall indicate the number of bales, marks, names, and addresses of consignor and consignee, locality of origin, date of shipment, invoice number, and transporting vessel, and shall also show that the consignment consists of abattoir pulled wool which, in the process of wet pulling and drying, has been subjected to a temperature of 165° F.

SEC. 4. Wool or hair not otherwise provided for in these regulations, or not complying with the provisions thereof, may be imported upon the conditions that such articles be shipped from port of entry to destination in cars or satisfactory containers, sealed in the manner prescribed in section 2 of Regulation I; that the destination be

a factory or establishment having satisfactory facilities for disinfecting the same, and that they will there be disinfected by proper exposure to a temperature of not less than 200° F. for at least 15 minutes, or in such manner as may be directed by the Chief of the Bureau of Animal Industry, prior to any transfer or reshipment therefrom. Such wool or hair may be stored in bond at the port of entry, subject to shipment and disinfection, as herein provided, on being released from bond. The consignee, owner, or his agent will be required to file a satisfactory bond or agreement to fulfill all requirements as to shipment and disinfection.

Under Regulation X the articles required to be disinfected shall be subjected to disinfection by methods found satisfactory and approved from time to time by the Chief of the Bureau of Animal Industry of the Department of Agriculture. Such methods were prescribed in Order No. 256, issued by the bureau on December 14, 1917, effective January 1, 1918. So much of this order as refers to the disinfection of hides and skins is quoted in full:

I. Disinfection of Hides and Skins prior to Shipment.

Hides and skins disinfected prior to shipment as provided by Regulation I, section 1 of said joint order No. 2, must be disinfected by one of the following methods:

(*a*) By immersion for not less than 24 hours in a 1 to 1,000 bichlorid of mercury solution.

(*b*) By immersion for not less than 20 hours in a solution containing 2 per cent absolute hydrochloric acid (hydrogen chlorid) and 10 per cent sodium chlorid.

(*c*) By immersion for not less than 40 hours in a solution containing 1 per cent absolute hydrochlorid acid (hydrogen chlorid) and 10 per cent sodium chlorid.

(*d*) By immersion for not less than 24 hours in a solution containing 1 per cent formic acid and mercuric chlorid in the proportion of 1 part to 2,500 parts of the solution. Hides or skins treated by this process shall be held for two weeks following the treatment before neutralization.

(*e*) By dehairing and pickling in a solution of salt containing a definite percentage of mineral acid and packing in barrels or casks while still wet with such solution, provided the hides or skins are not neutralized within 30 days after being so packed.

II. Disinfection of Hides and Skins After Arrival in the United States.

Hides and skins required by regulation I, section 2, and regulation II of said Joint Order No. 2 to be disinfected on arrival at a United States port of entry shall be moved to an approved warehouse at such port or in sealed cars or containers to an establishment having proper facilities for their sanitary control and disinfection. They shall be stored and handled prior to disinfection in compartments set aside for that purpose, and all hides and skins stored or handled in such compartments shall be treated in accordance with the following rules:

1. All dust, litter, or waste arising from sorting, cutting, handling, or moving said hides or skins prior to soaking shall be burned or disinfected by exposure to a temperature of not less than 100° C. (212° F.) moist heat for not less than 15 minutes.

2. The hides and skins shall be subjected to disinfection by one of the following methods:

(*a*) By immersion for not less than 20 hours in a solution containing 2 per cent absolute hydrochloric acid (hydrogen chlorid) and 10 per cent sodium chlorid.

(*b*) By immersion for not less than 40 hours in a solution containing 1 per cent absolute hydrochloric acid (hyrogen chlorid) and 10 per cent sodium chlorid.

(*c*) By immersion for not less than 24 hours in a solution containing 1 per cent formic acid and mercuric chlorid in the proportion of 1 part to 2,500 parts of the solution.

Hides or skins treated by this process shall be held for two weeks following the treatment before neutralization.

(*d*) By immersion for not less than 48 hours in a 1 to 1,000 bichlorid of mercury solution.

(*e*) By immersion for not less than 6 days in a 1 to 5,000 bichlorid of mercury solution, plus not less than 5 days in lime of the usual strength for dehairing.

Or, in lieu of disinfection by one of the foregoing mentioned processes, the effluent shall be subjected to treatment by one of the following methods:

(*f*) Heat the effluent from soak vats, mill drums, breaking machines, or other similar equipment to a temperature of 100° C. (212° F.) and maintain at that temperature for at least one minute.

(*g*) Treat the effluent from soak vats, mill drums, breaking machines, and other similar equipment with chlorin in such manner and in such amount (not less than 250 parts per million) as to secure efficient disinfection.

(*h*) Subject the effluent from soak vats, mill drums, breaking machines, and other similar equipment to filtration, the effluent from the filters to be treated with chlorin in sufficient amount and in such manner as to secure efficient disinfection: *Provided, however,* That in this method of treatment the sludge which collects on the filters shall be subjected to disinfection by heating at a temperature of not less than 100° C. (212° F.) for not less than 15 minutes.

(*i*) Treat the effluent from soak vats, mill drums, breaking machines, and other similar equipment with 50 parts of chlorin per million parts of effluent and heat at not less than 80° C. (176° F.) for not less than 30 minutes.

(*j*) In the case of sheepskins and goatskins, until further notice, by immersion for not less than 12 hours in a solution of milk of lime containing the equivalent of 5 per cent of calcium oxid (CaO).

Wisconsin Industrial Accident Rates, 1915–1917, Classified by Industry.

IN the October, 1918, issue of the MONTHLY LABOR REVIEW there were published data showing frequency and severity rates of industrial accidents in Wisconsin for the three-year period, 1915–1917, classified by cause of accident and nature of disability. These rates were based upon the estimated number of employees under the workmen's compensation act. The State industrial commission has recently issued another table showing frequency and severity rates for these same accidents per $100,000 of pay roll, classified by industry and nature of disability. The following table is a summary of the one issued by the Wisconsin commission. The original table contains 200 industrial classifications and also shows the pay-roll exposure and the number of days lost for each industry. The severity rating schedule formulated by the committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions was used in computing the time lost for fatal and permanent disability accidents.

WISCONSIN ACCIDENT RATES PER $100,000 PAY ROLL FOR THREE-YEAR PERIOD, 1915 TO 1917, CLASSIFIED BY INDUSTRY.

Industry.	Number of compensable accidents.				Rates per $100,000 pay roll.	
	Death.	Permanent disability.	Temporary disability (over 1 week).	Total.	Frequency.	Severity (days lost).
Agriculture	6	22	333	361	8.9	1,560
Mining	33	26	1,099	1,158	16.3	3,730
Quarrying	11	40	353	404	15.0	4,380
Stone, clay, and glass products	6	36	488	530	7.8	1,200
Metal products	46	715	9,830	10,591	7.8	720
Vehicles (manufacturing)	10	131	1,508	1,649	6.0	620
Lumber and wood (manufacturing)	112	555	7,268	7,935	12.6	2,180
Leather	8	90	960	1,058	4.4	500
Rubber and composition goods	3	23	347	373	7.8	980
Chemical manufacturing	5	24	281	310	5.5	930
Paper and paper products	27	142	2,498	2,667	11.6	1,450
Textiles	1	16	402	419	2.1	130
Foods	29	117	2,427	2,573	7.4	905
Printing and publishing	1	22	165	188	2.4	340
Laundries	3	2	54	59	2.7	1,000
Cleaning and dyeing	1	1	13	15	7.2	3,100
Construction	93	227	4,453	4,773	12.0	2,400
Trade	27	59	1,979	2,065	1.6	220
Service	5	23	458	486	4.1	550
Public utilities and transportation	70	139	3,157	3,366	6.8	1,350
Total	497	[1] 2,410	38,073	40,980	6.9	995

[1] Includes 22 permanent total disability cases.

One important fact brought out in the above table is the relatively high rates for agriculture, ranking sixth both as regards frequency and severity. Under the circumstances the almost universal exclusion of agricultural labor on the ground of the nonhazardous character of the work would hardly seem to be justifiable.

The industrial commission also issued a table showing the healing period of permanent injuries sustained during the year ending June 30, 1918. A summary of this table follows:

HEALING PERIOD OF PERMANENT INJURIES RESULTING IN DISMEMBERMENT OR TOTAL LOSS OF VISION, IN WISCONSIN, JULY 1, 1917, TO JUNE 30, 1918.

Nature of injury.	All cases.	Cases with healing period reported.	Average healing period reported (days).	Days lost.					
				1-30.	31-60.	61-90.	91-120.	121-160.	Over 160.
Loss of—									
Eye (enucleation)	22	20	55	8	7	3	.....	1	1
Eye (sight)	37	27	82	6	8	5	3	1	4
Hearing	2	2	75	.....	.....	2	.....	.....	.....
Arm	9	1	98	.....	.....	.....	1	.....	.....
Hand or palm	9	5	64	1	2	1	1	.....	.....
Thumb	53	49	45	24	16	4	2	1	2
One finger	410	375	34	223	113	27	9	2	1
Two or more fingers	164	143	52	42	64	17	9	7	4
Leg	17	7	300	.....	.....	2	.....	.....	5
Foot	4	.....	.....	.....	.....	.....	.....	.....	.....
Great toe	15	15	59	6	6	2	.....	.....	1
Other toe	13	13	42	5	5	2	1	.....	.....
Two or more toes	15	14	63	4	7	1	.....	1	1
Total	770	671	.....	319	228	66	26	13	19

Occupational Diseases Compensable in Connecticut and Wisconsin.

THE States of Connecticut and Wisconsin have amended the scope of their workmen's compensation laws this year to include occupational diseases. The Wisconsin law, which is patterned after the British act, enumerates 20 specific occupational diseases. These include lead poisoning, anthrax, mercury poisoning, phosphorus poisoning, arsenic poisoning, ankylostomiasis, nystagmus, glanders, compressed air illness, several miners' diseases, and a number of diseases due to poisonous dusts, gases, and fumes.

The Connecticut law includes all industrial diseases which are due to "causes peculiar to the occupation and which are not of a contagious, communicable, or mental nature." Another section of the law states also that "If an injury arises out of and in the course of the employment it shall be no bar to a claim for compensation that it can not be traced to a definite occurrence which may be located in point of time and place." Under the original Connecticut act the compensation commissioners had awarded compensation for occupational diseases, but had been overruled by the courts.

The compensation laws of California, Connecticut, Hawaii, Massachusetts, Wisconsin, and the United States Government now include occupational diseases.

WORKMEN'S COMPENSATION.

What the Term "Medical Service" in Workmen's Compensation Laws Includes.

By MARTIN C. FRINCKE, Jr.

ASIDE from compensation for disability or death, most States that now have workmen's compensation laws make additional provisions for the furnishing, free of charge to the injured employee, of medical, surgical, and hospital service. At common law an employer was not liable as such to an injured employee for medical services incurred by the latter in effecting a cure of his disability. Therefore, the courts and commissions in construing the meaning of the provisions for furnishing medical aid are bound by the express provisions of the statutes, interpreted in the light of the intention of the legislatures and the underlying principles upon which the compensation laws are founded.

The compensation laws of some States make quite explicit and detailed provisions as to just what service is to be included within the terms of the law, while others leave much to the discretion of the administrative bodies, merely requiring that such service shall be rendered as may be "reasonable or necessary." Questions as to the inclusiveness of the terms employed in the statutes have arisen, both in States making explicit provisions and in those making only general provisions. It is the purpose of this article to show, as nearly as possible, what service may be had as "medical service" under the expressed provisions of the statutes, and under those provisions as interpreted by the courts and administrative bodies. The courts and compensation commissions have generally, in construing the provisions of workmen's compensation laws, tended toward liberality, and, so far as medical provisions are concerned, have been guided by the real purpose of these provisions, expressed in a Connecticut case [1] as being "to restore the injured employee to a place in our industrial life as soon as possible by the use of all medical, surgical, and hospital service which ordinary usages of the modern science of medicine and surgery furnish. Humanity and economic necessity in

[1] Olmstead v. Lamphier, 104 Atlantic 489, reviewed in the forthcoming Bulletin No. 258 of the Bureau of Labor Statistics, Decisions of Courts and Opinions Affecting Labor, 1918.

this instance are in harmony in working for the accomplishment of the individual and public welfare."

Before passing to the interpretation of the courts and commissions as to the inclusiveness of the "medical aid" terms, a brief review of these provisions of the laws is presented, preceded by a discussion of the amount and the period of such service as controlled by these laws.

Amount and Period of Service.

On January 1, 1919, there were 42 workmen's compensation laws in effect in the United States. With the exception of Wyoming, all of these laws make provision, to a greater or less degree, for the furnishing of medical, surgical, and hospital service to injured employees free of charge to them. Arizona and New Hampshire, and by inference Alaska, make provision only for the supplying of medical service in the last sickness to an injured employee whose injuries result in death.

With regard to the provisions as to the period of service and the amount to be expended for such service, the laws providing for medical service may be roughly divided into three classes: First, those which make no provision for medical aid, except in the last sickness in fatal cases; second, those which make no restrictions except "reasonableness and necessity;" third, those which provide time and money limitations. The States included in the first class have already been mentioned above. Included in the second class are the United States, California, Connecticut, Idaho, Porto Rico, and Washington. In Washington, however, the employees contribute one-half the cost of the service. In the Philippine Islands there is a law closely resembling compensation laws which would come under this class.

The third class is by far the largest, and the laws falling in it may be conveniently divided into three subdivisions: First, those which make restrictions as to the amount of money to be expended for medical service, but not as to the period of the service; second, those limiting the period of service, but not the amount to be expended for such service; and third, those which make restrictions both as to the period and the amount. Seven jurisdictions whose laws make limitations ranging from $150 to $300, come in the first subdivision. The second subdivision includes 10 States placing limitations upon the period of medical service ranging from 2 weeks to 90 days. The third subdivision includes 15 States.

The following table shows clearly and quickly the classification of the States from the point of view of money value and period of service provided for:

CLASSIFICATION OF STATES SHOWING PROVISIONS MADE FOR THE SUPPLYING OF MELICAL AID, BY TIME AND MONEY LIMITATIONS.

No medical aid provided.	Unlimited as to time or money.	Limited as to money only.		Limited as to time only.		Limited as to both time and money.		
		State.	Amount.	State.	Period.	State.	Period.	Amount.
Alaska.[1]	U. S.	Hawaii .	$150	Ind.....	30 days.	Colo.....	30 days.....	$100
Ariz.[1]	Calif.	La.....	150	Mass.[2]...	2 weeks.	Del.....	14 days.....	25
N. H.[1]	Conn.	Md.....	150	Mich....	3 weeks.	Ill.....	8 weeks.....	200
Wyo.	Idaho.	Ohio[2]...	200	Nev.[2]...	90 days.	Iowa....	2 weeks.....	100
	P. I.	Oreg....	250	N. Y.[2]...	60 days.	Kans....	50 days.....	150
	P. R.	Utah....	200	Okla....	15 days.	Ky.[3]....	90 days.....	100
	Wash.[4]	W. Va ..	$150–300	R. I.....	4 weeks.	Me.[5].....	2 weeks.....	30
				Tex.[6]....	2 weeks.	Minn.[7] ..	90 days.....	100
				Va.....	30 days.	Mont....	2 weeks.....	50
				Wis.....	90 days.	Nebr.[8]...	21 days.....	200
						N. J.....	2 weeks.....	50
						N. Mex.[3]	3 weeks.....	50
						Pa.[5].....	14 days.....	25
						S. Dak ..	4 weeks.....	100
						Vt.....	14 days.....	100

[1] Medical fees for last sickness allowed in fatal cases.
[2] Board or commission may extend period; and in Ohio the amount.
[3] Increased for hernia operation: Kentucky to $200; New Mexico, $50 additional.
[4] During disability until payment of compensation (employees pay half).
[5] Increase allowed for a major operation; Maine fixed by board; Pennsylvania, $25 additional.
[6] Time may be extended 2 weeks in hospital cases on recommendation of physician.
[7] Court may increase to $200.
[8] Time extened for major surgical operation and dismemberment cases.

Extension of Service.

In some States, as noted in the preceding table, the extent of the medical service provided for under the compensation law may, in certain instances, be increased. It is recognized that particularly serious or exceptional cases require the expenditure of greater sums of money and longer periods of treatment in order to effect a cure of the injury or decrease the extent of the disability than do less serious cases. Thus, in Massachusetts the two-week period, and in Ohio the $200 limit may, in the discretion of the commission, be increased or extended "in unusual cases." So far as can be determined, there has been no court decision or commission ruling expressly defining the meaning of this phrase. However, Dr. F. D. Donaghue, medical advisor of the Massachusetts Industrial Accident Board, in analyzing the interpretations of that board said: "In a general way, the board has interpreted this section to mean: In unusually serious cases that require treatment in a hospital; in unusually serious cases where the compensation was not sufficient to care for the injured workman and for his family or his dependents if he had them; and in a third group of cases, in cases where special or unusual treatment might materially reduce the period of disability and materially minimize the consequences of the injury."[1] The law of West Virginia expressly provides that the limitation of $150 may be extended to $300 when by

[1] Boston Medical and Surgical Journal, May 23, 1918, p. 694.

doing so the disability may be decreased, and in New York the industrial commission is permitted to extend the period during which medical service must be furnished in cases where the nature of the injury or the process of recovery requires it. With the same purpose in view, the commission of Nevada is given discretionary power to extend the 90-day period to one year. Texas makes a similar provision in hospital cases, two extensions of one week each being authorized where convincing evidence of the necessity therefor is presented by the attending physician, and in Minnesota the court is given discretionary power to increase the amount from $100 to $200 upon the necessity being shown.

Extensions of the medical service in cases where the injured workman is required to undergo a "major surgical operation" are also allowed in Maine, where the $30 limit may be increased to any amount considered reasonable by the commission; in Nebraska, where the time limit of 21 days may be extended in the discretion of the commission; and in Pennsylvania, where the $25 limit may be extended to $50. In Kentucky the limit of $100 may be increased to $200, and in New Mexico the $50 limit may be increased to $100 in cases where it is necessary to operate for the cure of hernia. The question arises, however: What is a "major operation" within the meaning of the workmen's compensation acts? This question has been quite definitely decided for Pennsylvania by the workmen's compensation board of that State, which defined a "major operation" as follows:

> 1. A major operation is a surgical procedure which entails immediate serious consequences to the patient.
>
> 2. It is a surgical procedure which requires skill and training to perform.
>
> 3. All operative procedure other than finger and toe amputations, cleaning and draining wounds, evacuating pus by incision, the manipulation and reduction of uncomplicated dislocations, the treatment of uncomplicated fractured ribs, the removal of superficial foreign bodies, should be regarded as major operations.[1]

Concerning this definition Dr. W. L. Estes, chairman of the committee on workmen's compensation of the Pennsylvania State Medical Society, said: "This is an explanation. The term major operation would include the setting of fractures of long bones and reducing subluxations, providing accuracy and efficiency of reduction and retention be demonstrated by X-ray taken before and after surgical treatment."

An operation for the cure of hernia is known as a "radical operation" and falls within the scope of this definition.

[1] Monthly Bulletin, Pennsylvania Department of Labor and Industry, February, 1917, p. 49.

Commencement of the Medical Period.

The States that impose limitations upon the period of medical service do not all clearly indicate nor do the courts agree when the period is to commence. Of 25 State laws which fix the period during which medical service must be furnished, six [1] provide that the period shall begin with the date of disability, and 16 [2] that it shall begin with the date of injury. In 3 States (Illinois, Kansas, and South Dakota) no time for the commencement of the medical aid period is indicated in the law.

In those jurisdictions where the statute fixes the date of disability as the beginning of the period, little room for dispute arises. In Pennsylvania, one of these States, where the period is limited to 14 days, the question arose [3] as to whether the employer was liable for medical attention and if so between what dates. On January 20, 1916, a workman ran a splinter into his finger, but, pulling it out, continued with his work. The wound became infected, and on February 4, 1916, the man became disabled and reported for and received medical attention. It was held by the commission that the employer's obligation to furnish medical attendance began on February 4, 1916, the date of disability, and continued for 14 days. This question was considered by Nebraska, another of these States, in two cases which came before the State supreme court. In the first case [4] it was held that, where an accident which at first appeared to be trivial later resulted in a diseased condition, destroying the sight of an eye, the "injury," within the meaning of the statute, occurred when the diseased condition culminated, there being no apparent "violence to the physical structure of the body" at the time the accident occurred. In the second case [5] an employee was disabled by an injury. He received medical attention for three weeks and then returned to work, but was later compelled to stop and seek additional medical treatment because blood poisoning had set in. In this case the injury was apparent at the time of the accident, and it was held that recovery could not be had for the treatment of the blood poisoning, since the treatment was not rendered "during the first 21 days after the disability began."

The greatest number of conflicts of construction arise in those States where the period of medical service is fixed to commence at the date of the injury. In Indiana, for instance, where the law provides

[1] Iowa, Massachusetts, Nebraska, Pennsylvania, Vermont, and Delaware.

[2] Colorado, Indiana, Kentucky, Maine, Michigan, Minnesota, Montana, Nevada, New Jersey, New Mexico, New York, Oklahoma, Rhode Island, Texas, Wisconsin, and Virginia.

[3] Bechtel *v.* Bodenstein & Kummerle (Inc.), Pennsylvania Workmen's Compensation Decisions, 1916, p. 19.

[4] Johnson *v.* Union Stockyards Co., 99 Nebr. 328, 156 N. W. 511.

[5] Epsten *v.* Hancock-Epsten Co., 163 N. W. 767.

that medical service shall be furnished "during the 30 days after an injury," the appellate court of the State held [1] that the industrial board had no authority to order that an attending physician be furnished the employee at the expense of the employer after the expiration of the 30 days. In construing these provisions of the compensation laws the courts tend toward liberality. Thus, the same court held in another case [2] that, where an employer sent an injured employee to a hospital, directing the physician to "do the best you can for him," this was sufficient to warrant the inference that the physician was authorized to continue his treatment beyond the limited period at the expense of the employer. And again it was held by this court that, under a correct construction of the law, medical service might be required to be rendered beyond the 30-day period in the case of an emergency. In this case [3] the employee had injured his foot and was sent by his employer to a hospital, where his foot was amputated. The wound did not heal and gangrene set in, necessitating another amputation. The 30-day period was about to expire, and the second amputation could not be performed until a day or two after the expiration of that period. The court regarded this as an emergency and required the employer to pay for medical services beyond the 30-day period. In Maine the law requires that the medical service shall be rendered during the first two weeks after the injury. The industrial commission of that State, in its administration of the law, made a rule requiring the employer to provide medical service for two weeks after the employee's disability occurred. The Supreme Judicial Court of Maine, in a case [4] disputing an award by the industrial commission based upon this rule, held that the rule was inconsistent with the law and that the period during which medical service must be furnished commenced with the date of the injury. The Michigan law states that medical service shall be furnished "during the first three weeks after the injury." In interpreting this clause the industrial accident board held [5] that the words "accident" and "injury" must be distinguished, and that where an accident occurs, later resulting in an injury, the period of medical service shall commence at the time the injury manifests itself. The supreme court of the State overruled this opinion, however, in two subsequent cases,[6] holding that the accident and the injury are concurrent in time and that an employer can not be held liable for such service beyond the 3-week period from the date of the accident even where he

[1] Born & Co. *v.* Durr, 116 N. E. 428.
[2] In re Myers, 116 N. E. 314.
[3] In re Henderson, 116 N. E. 315.
[4] In re McKenna, 103 Atlantic 69.
[5] In re Hart, Michigan Workmen's Compensation Cases, 1916, p. 338.
[6] Cook *v.* Holland Furnace Co., 166 N. W. 1013 and McMullin *v.* Gavette Construction Co., 166 N. W. 1019.

has failed to furnish proper medical service during the said period. In Wisconsin, where the law provides that the employer must render medical service "for 90 days immediately following the accident" an award [1] was refused for such service where the injured employee received treatment about five months subsequent to the injury.

As already stated, in Illinois, Kansas, and South Dakota, the time for the commencement of the period of service is not specifically mentioned in the law. In construing this provision of the South Dakota statute, which was in this respect patterned after the Illinois law, and may therefore serve as a construction of that law also, the attorney general of South Dakota in reply to an inquiry of the industrial commission said:

> Under the language of our statute, however, it is my opinion that the question of whether the injury is the proximate cause, or merely a remote cause, of the subsequent necessity for medical, surgical, or hospital services is wholly a question of fact to be determined from the evidence in each particular case, and that if the evidence shows that the injury was the proximate cause of the necessity for such services, the same may be performed within any four-week period within a reasonable time after the injury, and the employer is liable to the employee for compensation therefor.[2]

This same construction was adopted by the Supreme Court of Illinois in a case [3] where an employee was injured in the eye and fifteen months later a cataract caused complete blindness; the court held that the employee must submit to an operation and the employer must pay all the surgical and hospital expenses.

Kind of Medical Service.

The medical aid provisions of the workmen's compensation laws of some States are more inclusive and explicit than those of others. Some laws simply require, in general terms, that the employer shall supply the injured employee with such medical, surgical, and hospital aid as may be reasonable and necessary, while in others the attempt is made to enumerate the various kinds of service that the employer must provide to the injured employee. Both these classes of laws have been found by the courts and commissions to be inadequate in expressing exactly what service might be included within them. In order to understand the interpretations of these laws better, it may be advisable to survey and analyze briefly the medical service provisions of these statutes.

The following table shows the various specific provisions found in the laws of the different jurisdictions, classified by kind of service:

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[1] Fifth Annual Report on Workmen's Compensation, 1915-16, Wisconsin, p. 20.
[2] First Annual Report of the South Dakota Industrial Commission, 1918, p. 25.
[3] Joliet Motor Co. *v.* Industrial Board, 117 N. E. 423.

CLASSIFICATION OF STATES BY KIND OF SERVICE FOR WHICH PROVISION IS MADE.

Medical, surgical, and hospital service.	Medical and surgical supplies.	Attending physician.	Nursing.	Medicines.	Artificial members.	Crutches.	Apparatus.	Transportation.
Calif.	Calif.		Calif.	Calif.	Calif.	Calif.	Calif.	
Colo.	Colo.					Colo.	Colo.	
Conn.		Conn.						
Del.								
Hawaii.	Hawaii.							
Idaho.			Idaho.	Idaho.		Idaho.	Idaho.	
Ill.								
Ind.	Ind.	Ind.						
Iowa.	Iowa.							
Kans.	Kans.		Kans.	Kans.		Kans.	Kans.	
Ky.	Ky.		Ky.				Ky.	
La.				La.				
Me.				Me.				
Mass.				Mass.				
Md.			Md.	Md.		Md.	Md.	
Mich.				Mich.				
Minn.	Minn.			Minn.		Minn.	Minn.	
Mont.				Mont.				
Nebr.				Nebr.				
Nev.	Nev.		Nev.	Nev.	Nev.	Nev.	Nev.	Nev.
N. J.				N. J.				
N. Mex.				N. Mex.				
N. Y.			N. Y.	N. Y.		N. Y.	N. Y.	
Ohio.			Ohio.	Ohio.				
Okla.			Okla.	Okla		Okla.	Okla.	
Oreg.								Oreg.
Pa.	Pa.			Pa.				
P. I.								P. I.
P. R.				P. R.				
R. I.								
S. Dak.								
Tex.				Tex.				
Utah.			Utah.	Utah.				
Vt.	Vt.							
Va.	Va.	Va.						
Wash.								Wash.
W. Va.								
Wis.	Wis.			Wis.	Wis.	Wis.	Wis.	
U. S.	U. S.							U. S.

In the following sections are considered the interpretations and rulings of the various courts and administrative bodies as to the inclusiveness of the terms used in the different laws.

Hospital Service.

All the States providing medical aid expressly include hospital service within the terms of the laws, and when the nature of the case requires it such service can always be had. The following cases are illustrative:

The appellate division of the Supreme Court of New York held that [1] where the servant was injured and taken to a hospital, and the master offered upon his complaint to take him to another hospital, but the servant refused and went to still another hospital, the master could not be charged with failing to provide proper medical and hospital care.

In Louisiana, an employee was injured by having her hair caught in some machinery and her scalp torn off. In an action for damages

[1] Junk *v.* Terry & Tench Co., 163 N. Y. S. 836, 176 App. Div. 855.

she alleged that her employer had not furnished her with the medical aid required by the statute, but the court held [1] that inasmuch as the employer had removed her from the Charity Hospital to the Touro Infirmary and had her cared for there for 25 days, sufficient medical and hospital aid had been rendered.

Where a man who had broken his arm was sent from a remote locality where the accident had occurred to the nearest town which had no hospital and was there lodged, boarded, and nursed by a boarding-house keeper, it was held [2] by the California commission that the services of the boarding-house keeper could be properly charged as hospital services. In another case which came before the California commission a man was injured and, instead of being sent to a hospital where he could get the nursing needed, he was placed in an unsanitary and unclean room in a hotel and no nursing service was provided. Gangrene set in and the patient nearly died. It was held [3] that such service as was rendered was "wholly inadequate and too long endured."

It seems to be the general rule that a patient may be treated in a private ward in a hospital (1) if the nature of his injuries require it and (2) if his mode of living is such that if he were paying the bills himself he would have a private ward. In discussing the reasonableness of supplying private ward service the Connecticut commission said: [4]

> The subjects of inquiry embrace the circumstances and mode of life of the claimant, the personality of the injured man, and also the character of his injuries. One who is used to luxuries and whose nature is delicately attuned, and who would if he paid the bills himself, go into a private ward, may require different treatment from one differently circumstanced and with different habits of life.

In this case it was decided that in view of the fact that the injured employee was a workingman whose mode of life was plain and simple the requirements of the statute were sufficiently complied with in placing him in a public ward.

On the other hand, it was held [5] by the same commission to be "unquestionably necessary" to put in a private ward an injured laundry worker who had had her hand caught and partially cooked in a mangle, so that her fingers and a part of her thumb had to be amputated. And again [6] this commission decided that it was reason-

[1] Boyer *v.* Crescent Paper Box Factory, 78 Southern 596.

[2] Byrne *v.* Inyo Development Co., California Industrial Accident Commission Decisions, 1919, vol. 5, p. 224.

[3] Campbell & Latva *v.* White Lumber Co., California Industrial Accident Commission Decisions, 1916, vol. 3, p. 33.

[4] Kelly *v.* Whitaker, Connecticut Compensation Commission Decisions, Vol. II, p. 363.

[5] Jolly *v.* Howe, Connecticut Compensation Commission Decisions, Vol. II, p. 112.

[6] Dufrene *v.* Risdon Tool & Machine Co., Connecticut Compensation Commission Decisions, Vol. I, p. 411.

able and proper that an injured machinist who was to be operated upon for the cure of hernia should be placed in a semiprivate ward.

In discussing this question the Ohio commission recognized the fact that a hospital would sometimes place an injured man in a private ward and although it did not express any objections it called attention to the fact that the amount that can be recovered for such service is limited by the Ohio statute.[1] The commission declared, however, that it was "very necessary that these patients (industrial) be treated as private patients and not as charity patients."

Nursing Service.

The laws of 10 States[2] specifically require the employer to furnish nursing service. In addition to these Connecticut and Wisconsin have by construction also included such service. It may be stated as a general rule that nursing service may be included in the terms "medical and surgical service" and is usually understood to be a part of hospital service. Nursing by nonprofessional nurses and members of the injured man's family may in some cases be included, the usual requirements being, in the case of a nonprofessional nurse, that no better service was available or that the nurse has given up other employment for the purpose, and in the case of a member of the family, that the nurse be a professional. These rules are, however, subject to exception.

In California, nursing service can not be included in the charges for "medical service" if the nursing was done by a member of the injured employee's family unless such person is a professional nurse;[3] exception was made, however, in the case of a son who had given up lucrative employment in order to nurse his father.[4] It was also decided that a sister who nursed her injured brother who boarded with her could not be considered as a nurse within the meaning of the statute, especially as the case was a nonhospital case.[5] Again, a mother who nursed her injured son without the express direction of the physician was not permitted to charge for her services.[6] On the other hand, a woman who kept a boarding house and who gave up her work to nurse an injured man was regarded as giving chargeable medical service,[7] as was also a landlord of a hotel who nursed a baker who had been burned.[8]

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[1] Bulletin of the Industrial Commission of Ohio, October, 1914, p. 34.

[2] California, Idaho, Kansas, Kentucky, Maryland, Nevada, New York, Ohio, Oklahoma, and Utah.

[3] Wyman *v.* Huff, California Industrial Accident Commission Decisions, 1914, vol. 1, p. 20.

[4] Kelly *v.* Manley, California Industrial Accident Commission Decisions, 1915, vol. 2, p. 355.

[5] Jolley *v.* O'Shea, California Industrial Accident Commission Decisions, 1915, vol. 2, p. 546.

[6] Forbes *v.* County of Humbolt, California Industrial Accident Commission Decisions, 1915, vol. 2, p. 882.

[7] Dexter *v.* People's Cloak and Suit Co., California Industrial Accident Commission Decisions, 1915, vol. 2, p. 542.

[8] Woolf & Thompson *v.* Joy, California Industrial Accident Commission Decisions, 1915, vol. 2, p. 948.

Under the construction placed upon the statute by the Ohio commission, nursing performed by members of the injured man's family is not chargeable medical service although nursing service may be had and charged for where in the opinion of the attending physician such service is needed, and in such case the nurse need not be a professional.[1]

The Connecticut commission, however, has not set up any such rule but has merely considered the reasonableness and necessity of such service, and accordingly has allowed an award for services rendered by a boarding-house keeper,[2] and also in another case, for services rendered by the injured man's wife. An award was also granted by this commission for nursing services rendered by an injured boy's sister who was a professional nurse and gave up profitable employment in order to treat him.[3]

A very careful and complete discussion of the subject of nursing service was made by the Supreme Court of Wisconsin in a leading case[4] where the injured employee was nursed by a relative and the award made for her services was disputed. It was said by the court that—

> It has become so common for a physician or surgeon to have a nurse as his assistant, in cases requiring attention at shorter intervals than he can well be present, that the major service can well be regarded as including the minor attention, in all cases where the nurse is employed by the physician or surgeon, or by his direction, and the services are an incident of the treatment; and that would obtain whether the medical attendant was engaged by the employer or the employee.

The only provision in the law of Wisconsin at that time (October, 1913) was that when nursing service was necessary the compensation was to be 100 per cent of the wage instead of 65 per cent. In the case in question, the service was voluntary and, in refusing to allow an award for nursing service, the court said:

> Good administration would require, it seems, that the necessity for the services of a nurse should be certified to by the attending physician or surgeon, as a prerequisite to its allowance either as an incident to the medical or surgical treatment or greater allowance for disability indemnity.

This decision was referred to by the district court of Itasca County, Minnesota, where an award for the nursing services of the wife of the injured man was refused.[5]

The United States Employees' Compensation Commission has allowed an award for nursing services rendered by a mother who gave up employment to act as a nurse.[6] And in Utah, nursing services

[1] Bulletin of the Industrial Commission of Ohio, October, 1914, p. 36.
[2] Saddlemire *v.* American Bridge Co., Connecticut Compensation Commission Decisions, vol. 2, p. 666.
[3] Swan *v.* N. Y., N. H. & H. R. R. Co., Connecticut Compensation Commission Decisions, vol. 2, p. 451.
[4] City of Milwaukee *v.* Miller, 144 N. W., 188.
[5] Danielson *v.* Peterson, Bulletin No. 14, Department of Labor and Industries, 1917, p. 34.
[6] Second Annual Report, United States Employees' Compensation Commission, p. 229.

rendered to a man by his wife were regarded as reasonably chargeable as medical services by the commission which allowed an award.[1]

Dental Work.

None of the compensation jurisdictions specifically state in their laws that dental services must be furnished to injured employees. Such service has been held by some commissions to be included, as a matter of course, in the general medical, surgical, and hospital provisions.

A case arose in California where a workman had been injured in the jaw and mouth so that he lost several incisor teeth. The employer provided all the required surgical service but did not provide any dental service and the insurance carrier contested an award requiring such service to be rendered. The commission granted the award saying: "This injured man was entitled by law to dental surgery with the view of repairing, as far as may be, damage done by injury."[2] Although this commission included dental work within the term "medical and surgical aid" it refused to allow an award for the repair of a plate of false teeth which was damaged in an accident. It was here held that: "Repair of damage to false teeth is not medical or surgical treatment required to be furnished by the employer, though the furnishing of false teeth where such is rendered necessary by an injury is so required."[3] There was a strong dissenting opinion as to this conclusion by Commissioner French.

The Ohio commission in construing the statute of that State has decided that dental work may be included within the provisions of the compensation law where such work is made necessary as a direct result of an accident.[4] Dental work has also been included within the terms medical and surgical treatment by the Massachusetts commission,[5] and the commission of Minnesota has allowed bills for fees for such service.[6] The Pennsylvania commission has held that: "An employee who receives an injury in the course of his employment which requires the services of a dentist is entitled to such services at the expense of his employer."[7]

The attorney general of Iowa rendered the opinion that although the law would not permit the allowance of any disability payments for injury to teeth the treatment might properly be allowed under the

[1] Fowler *v.* Utah Fire Clay Co., Utah Commission Decisions.

[2] Gardner *v.* Sierra Nevada Wood & Lumber Co., California Industrial Accident Commission Decisions, 1916, vol. 3, p. 259.

[3] De Witt *v.* California Highway Commission, California Industrial Accident Commission Decisions, 1918, vol. 5, p. 140.

[4] Bulletin of the Industrial Commission of Ohio, October, 1914, p. 35.

[5] McGue *v.* George Lawley & Son, Massachusetts Industrial Accident Board Decisions.

[6] Bulletin No. 11, Minnesota Department of Labor and Industries, August, 1915, p. 25.

[7] Ruddick *v.* Jones & Laughlin Steel Co., Pennsylvania Compensation Board, 1916, p. 18.

head of medical and surgical treatment.[1] In West Virginia it has been held, however, that the act does not permit the allowance of awards for dental work.[2]

Artificial Members.

California, Nevada, and Wisconsin are the only States that make specific provision in their laws for the supplying of artificial limbs to injured workmen as a part of the medical service to be furnished by the employer. Some of the other States, however, have construed the medical and surgical aid provisions to include such services, particularly in cases where the artificial limb will help to restore the earning capacity of the injured workman.

There are several factors which have been taken into consideration in determining whether artificial members or other appliances are properly to be included as medical service. In the first place the provisions and purpose of the statute should be considered. Under most State laws a certain definite amount of compensation is awarded for the loss of a member irrespective of the injured worker's loss of earning capacity or future disability. In such States artificial limbs would be less likely to be construed as "medical service," unless such appliances were specifically mentioned in the law or unless the medical treatment required were such as "to cure and relieve from the effect of the injury." On the other hand, under the Federal act the amount of compensation for permanent partial disabilities is dependent solely upon the subsequent loss of earning power. Any expenditure, therefore, which would restore the injured worker's earning capacity would be good policy, and this is the position taken by the United States Employees' Compensation Commission.

A second factor to be considered is whether the artificial member or appliance is an integral and nonremovable part of the person or body, such as a tooth, or whether it is detachable, such as a crutch or an artificial hand. Some commissions have held that the former should be included as medical service, while the latter should not.

A third point, already touched upon, is whether the artificial member serves a useful or industrial purpose, such as an artificial leg, or whether it is merely ornamental, such as a glass eye. Artificial members are more likely to be furnished in the former case than in the latter.

Another question in this connection is whether an injury to or loss of an artificial limb should be compensated for. It was held by the United States commission that where a man having an artificial leg was employed and the leg was broken, that he had sustained

[1] Iowa Workmen's Compensation—Legal Opinions by H. E. Sampson (1916), p. 38.
[2] Howle v. Charleston Electric Co., Nov. 19, 1914, Commission Decisions.

no injury within the act and was not entitled to an award.[1] In another case where a fire fighter was struck in his glass eye and it was broken, it was held that, as there was no compensable injury, and as the original eye was not lost while in the Government service, no award could be had for a new glass eye.[2] But where a Government employee sustained an injury which resulted in the shortening of his leg and necessitated the use of a leg extension, any subsequent injury to such extension might be compensated for where the failure to do so would result in a loss of earning capacity.[3]

The Supreme Court of Errors of Connecticut, in upholding an award of $115 for an artificial leg, said in part: [4]

> Our act contemplates the furnishing of all medical and surgical aid that is reasonable and necessary. The purpose of this provision is to restore the injured employee to a place in our industrial life as soon as possible by the use of all medical and surgical and hospital service which the ordinary usages of the modern science of medicine and surgery furnish.

After commenting on the fact that it is commonly conceded that surgical aid includes the furnishing of splints, bandages, apparatus, and crutches, the court continued:

> There is no difference between supplying these and the artificial limb. That pertains to surgery and is used in surgery. The only difference between the crutch and an artificial limb is that the latter costs more than the former.

This decision was followed by the commission in a subsequent case,[5] where an award of $114 was allowed for an artificial leg. Both these decisions overrule and reverse a prior decision [6] of the commission.

Specialists, Assistants, X-Ray, etc.

When a law requires that all the treatment must be given an injured employee as may be "reasonably required," can it be said that specialists, advisers, and assistants could be included thereunder? The Connecticut Supreme Court of Errors has held [7] that the services of an assistant physician in an operation for the cure of hernia could be properly charged for as a part of the medical service. In California it was held [8] that the services of a surgeon specialist called by the employer's doctor at the request of the employee's family could

[1] Nathan Klein, United States Employees' Compensation Commission, second annual report, p. 232 (Jan. 30, 1918).

[2] C. W. Honold, United States Employees' Compensation Commission, second annual report, p. 232 (Feb. 8, 1918).

[3] A. N. Babcock, United States Employees' Compensation Commission, second annual report, p. 234 (Aug. 30, 1918).

[4] Olmstead *v.* Lamphier, 104 Atlantic 488.

[5] Saddlemire *v.* American Bridge Co., Connecticut Compensation Decisions, vol. 2, p. 666.

[6] Pedroni *v.* Blakeslee & Sons, Connecticut Compensation Decisions, vol. 1, p. 670.

[7] Mahoney *v.* Gamble-Desmond Co., 90 Conn. 255, 96 Atlantic 1025.

[8] Swain *v.* Pacific Telephone & Telegraph Co., California Industrial Accident Commission Decisions, 1915, vol. 2, p. 402.

reasonably be included. The commission of this State also held [1] in another case that where the treatment the employee was receiving did not improve his condition, the injured man could call in a specialist in the kind of injury he had received and have his services charged against the employer.

In a case considered by the California commission the employer was required to pay for treatment which an employee was required to go to San Francisco to obtain where it appeared that the treatment which he received in the place where he was injured was inadequate, the injury having been sustained in a small town and the treatment supplied having been all that was there available. The commission said: [2]

> The compensation act contemplates that adequate treatment be provided by the employer. The most important treatment at the time of the injury is to ascertain the nature and extent of the injury, and where a fracture is involved this seldom can be done without adequate appliances, such as facilities for taking X-ray photographs, and an employee is justified in going at once to where a correct diagnosis of his case can be made.

The rules of the Ohio commission make express provision for the allowance of X-ray service within the terms of the compensation act.[3]

Transportation.

It often happens that an accident occurs in a place where there is no hospital or medical or surgical aid available and it becomes necessary to transport the injured workman to the nearest place where proper treatment may be had. Nevada, Oregon, the Philippine Islands, Washington, and the United States have, by express provisions in their acts, included such service as a part of the medical treatment. The other jurisdictions have, as yet, taken no legislative action, although some have included such service by construction.

A Connecticut commissioner in allowing an award for transportation said: [4]

> I have allowed an award for transportation from the home of the claimant to the physician employed by the respondent. It is the duty of the respondent to furnish surgical aid at the place of the claimant and not somewhere else. If, as a reasonable method of discharging this duty, the respondent employs a physician at a place convenient to the claimant and has the claimant see the physician at his office, the transportation comes fairly under the head of "surgical aid" as used in the act.

In reply to an inquiry, the Industrial Accident Board of Texas rendered the opinion that if an injury occurred in a rural district and it becomes necessary to transport the injured man to a hospital, railroad

[1] Grant *v.* City and County of San Francisco, California Industrial Accident Commission Decisions, 1916, vol. 3, p. 376.
[2] Miller *v.* Aetna Springs Co., California Industrial Accident Commission Decisions, 1915, vol. 2, p. 534.
[3] Bulletin of the Ohio Industrial Commission, October, 1914, p. 33.
[4] Swanson *v.* Sargent & Co., Connecticut Compensation Commission Decisions, vol. 1, p. 433.

fare might be included as an item of the expense incurred for medical aid.

The California commission has regarded transportation as a part of the medical aid service without question when the transportation is reasonable and necessary in any particular case. It has, however, refused to allow awards for such service in two cases. One [1] was where the injured man, who made a trip for which he asked an award, intended to make the trip regardless of the taking of the treatment which he received at the destination, and the other [2] was where a man who had lost his eyesight made a useless and unnecessary trip to consult a specialist concerning the possible saving of his eyesight.

Cure and Relief from Effects of Injury.

The inclusiveness of a particular medical provision is dependent also upon the expressed purpose of this provision. Thus the phrase in the California act which states that such medical, surgical, and hospital treatment as may be reasonably required "to cure and relieve from the effects of the injury" has the effect of increasing the scope of the medical service. In a case [3] which came before the California commission the employee was so badly injured as to require not only surgical treatment but other service as well. The insurer provided only the surgical service but provided that beyond the 90-day period required at that time. The commission held that all necessary treatment to effect a cure must be given, and that giving one kind of treatment beyond the limited period did not excuse the failure to give the other kind of treatment.

The purpose of these provisions, as already stated, is to overcome the disability resulting from the injury. With this in mind the same commission held [4] that where an injured workman had received medical treatment up to the point where further medical service would not effect a cure or produce further improvement, the injured man was not entitled to further treatment at the employer's expense.

However, where an employee is treated by the employer's physician, who discharges the injured man as cured when, in fact, the disability has not been overcome, it was held [5] that the employer was liable for such further necessary treatment as the employee obtained elsewhere.

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[1] James *v.* Foreman, California Industrial Accident Commission Decisions, vol. 3, p. 246.

[2] Galante *v.* Mammoth Copper Mining Co., California Industrial Accident Commission Decisions, vol. 2, p. 723.

[3] Gardner *v.* Sierra Wood & Lumber Co., California Industrial Accident Commission Decisions, vol. 3, p. 259.

[4] Employers' Liability Assurance Corporation *v.* Elmore, California Industrial Accident Commission Decisions, vol. 4, p. 359.

[5] Douglas *v.* J. & J. Drug Co., California Industrial Accident Commission Decisions, 1915, vol. 2, p. 181.

Qualifications of Persons Rendering Medical Service.

Questions have arisen in various States as to what kind of medical service is contemplated by the medical provisions of the compensation laws from the point of view of the qualifications of the person rendering such medical service. In the following sections the attitude taken by the various commissions on this subject will be presented.

Osteopaths.

Is treatment by an osteopath medical and surgical treatment within the meaning of the compensation statutes? In California an award was made for a bill for medical services rendered by an osteopath without raising the question as to the propriety of such service.[1]

The Iowa Industrial Commission decided, however, that "an osteopath does not furnish medical or surgical service within the meaning of the Iowa compensation act, and an employer is not required to pay for treatment of that character, it being service other than that required by law." The Connecticut commission made a similar ruling on this subject.[2]

Bonesetters.

Connecticut and Ohio are the only States, so far as could be determined, where the question of whether or not an award should be allowed for the services of "bonesetters" was ever considered. In the Connecticut case [3] an award was granted for such services, but here the parties agreed to such service, and this case can not, therefore, serve as a definite guide as to what action would be taken by the commission in case a dispute arose; but in the Ohio case [4] "the opinion of the commissioner construes section 42 [of the compensation act] to mean that money shall not be paid out of the State insurance fund on account of medical and surgical services rendered by persons who have not been regularly admitted to the practice of medicine." This definition would, in most cases, also exclude osteopaths, chiropractors, and Christian Science practitioners.

Chiropractors.

The services of chiropractors have been held, in two instances, not to be included in the medical service contemplated by the compensation acts. It was held by the Connecticut commission that where an employer provided an injured employee with no medical service other than that of a chiropractor, the employer had failed in his duty

[1] Leadbettor v. Industrial Accident Commission, 177 Pac. 449.
[2] Spain v. Metropolitan Furniture Co., Connecticut Compensation Commission Decisions, July, 1917.
[3] Hodge v. Hoffman, Connecticut Compensation Commission Decisions, vol. 1, p. 322.
[4] Howat v. Youngstown Iron & Steel Co., Bulletin of the Ohio Industrial Commission, vol. 1, No. 7, p. 155.

to provide medical aid, the commission saying, in part, that although it was "not without the limits of possibility that some persons or group of persons" might "discover a new and better method than that generally practiced and taught" for the cure of human ailments, such a contingency was "highly improbable." [1]

The commission of Wisconsin refused to allow a bill for $55 for the services of a chiropractor, holding that although such treatment might be beneficial it could not properly be included in or regarded as "medical and surgical treatment." [2] An award was also refused by the United States Employees' Compensation Commission for services rendered by a chiropractor, on the ground that such a person was "not a licensed physician" within the meaning of the statute.[3]

Christian Science Practitioners.

At the present time no State in its compensation law recognizes the service of a Christian Science practitioner as "medical service," although a bill has recently been presented in the senate of the Wisconsin Legislature proposing to amend the compensation law of that State so as to permit such services to be included.

In two cases in California it has been held that such services do not constitute "medical treatment." One [4] was "where an employee sustained a muscular strain and consulted a healer who made no diagnosis and used no drugs or mechanical appliances in healing, but who healed by prayer and the laying on of hands and who was not licensed by the State Medical Board to practice medicine." The other case [5] was one where the ailments of the injured employee indicated the necessity of surgical treatment; for two months however she relied largely upon treatment by a Christian Science practitioner. Here the commission said: "Whatever may be said in favor of treatment at the hands of Christian Science practitioners regarding other ailments resulting in or occasioned by industrial accidents, this commission can not hold that such treatment is such as, 'may reasonably be required to cure and relieve,' where surgical treatment is indicated by the symptoms."

Chinese Herb Doctors.

As already noted, in Connecticut the commission allowed an award for the services of a bonesetter where both employer and employee acquiesced in such treatment. The California com-

[1] Reed *v.* Orient Music Co., Connecticut Compensation Commission Decisions, vol. 1, p. 37.
[2] Jones *v.* Severhill, Wisconsin Commission Decisions, reported by the Weekly Underwriter.
[3] J. G. Hauston, United States Employees' Compensation Commission, second annual report, p. 229.
[4] Miller *v.* Boos Brothers Cafeteria, California Industrial Accident Commission Decisions, vol. 4, 1917, p. 388.
[5] Ash *v.* Barker, California Industrial Accident Commission Decisions, vol. 2, p. 40.

mission, however, refused to take such a view with regard to Chinese herb doctors. Thus, in a case where the employer refused or failed to supply medical treatment and the employee went to a Chinese herb doctor and so notified his employer and the employer raised no objection, it was held that "treatment by a Chinese herb practitioner, not a duly licensed physician or surgeon, is not medical and surgical treatment within the meaning of that term as used in the workmen's compensation act, and an injured employee is not entitled to reimbursement for the expense of such treatment." [1]

[1] Knock *v.* Reliance Gas Regulator, etc., Co., California Industrial Accident Commission Decisions, vol. 4, p. 181.

Provision for Second Injuries Under Workmen's Compensation Laws.

By Carl Hookstadt.

ONE consequence of workmen's compensation laws, possibly unforeseen at the time of their enactment, is the adverse effect of such laws upon the employment of physically defective workers. When a one-eyed workman loses the second eye in an industrial accident he will be totally disabled for life. If the employer is required, under the law, to pay compensation for permanent total disability in such cases he will feel considerable apprehension about employing such men. On the other hand, if the employee is to receive compensation for the loss of one eye only, regardless of the resulting disability and loss of earning capacity, he will be inadequately compensated and the purpose of the compensation act will be partially defeated.

Industrial discrimination against crippled workers, accentuated by the return of disabled soldiers, presents a serious and complex problem. Many factors contribute to this discrimination, one of which is the fear that the employment of crippled workers will greatly increase the cost of accident compensation. A few of the States have enacted remedial legislation on the subject, but most of the States have thus far done nothing to meet this problem. The statutory provisions relative to second injuries, as interpreted by the courts and commissions in the 44 States having workmen's compensation laws at the present time, are as follows:

In 13 States [1] compensation is granted only for the disability caused by that particular injury without reference to previous injuries. In these States the factor of increased compensation costs as a contributory cause of discrimination has of course been eliminated, but, on the other hand, the employee receives grossly inadequate compensation. In this connection the experience of the Montana Industrial Accident Board is illuminating. The Montana law makes no specific provision covering second injuries. The board, however, held that an employer should not be penalized for his generosity in hiring a crippled workman. One of the principal employers of the State, having a hundred or more crippled workers on his payroll, requested a ruling as to the extent of his liability in case of a subsequent accident to any of these crippled men, stating that if he was to be liable for

[1] California, Colorado, Delaware, Indiana, Michigan, Montana, Nebraska, New Jersey, Oklahoma, Pennsylvania, Texas, Virginia, and Wisconsin.

the total disability he would immediately discharge them. The board promptly ruled that the employer would be liable only for the subsequent injury without reference to the resulting disability. It is stated that as a result of this ruling over 400 cripples in the State retained their positions as watchmen, doorkeepers, etc., whereas if the board had held the employer liable for the entire disability these crippled men would all have been discharged and would of necessity in the majority of instances have become a charge upon society. The board does not defend its interpretation of the law but pleads necessity and expediency and its desire to protect the cripple. Similar to Montana's experience has been that of California. The California act at one time provided for full compensation, or life pension, in case of a worker who loses the sight of his second eye. The commission took into consideration the social need and unfortunate condition of such a man and deemed it wise to give him a life pension. However, the act was amended at the request of the disabled men themselves, who stated that they found it difficult to obtain employment.

In 14 States [1] compensation is granted for the entire disability caused by the combined injuries. In case of the loss of a second eye, therefore, compensation would be awarded for permanent total disability. This places a heavy burden upon the employer, who under the circumstances feels himself justified in refusing to employ crippled men. New York early met the problem by relieving the employer of the extra liability. An amendment to the New York law, enacted in 1916, provides that in case of a second major disability the employer shall be held liable only for the second injury, but the injured employee shall be compensated for the disability resulting from the combined injuries. The additional compensation is paid out of a special fund. This fund is created by requiring the employer to contribute $100 for each fatal accident in which there are no persons entitled to compensation. The States of Minnesota, North Dakota, Ohio, and Utah have recently followed the example set by New York and enacted similar provisions. This plan of taking care of the extra compensation liability through a special fund insures substantial justice to both employer and employee and removes one potent factor of discrimination.

In six States [2] compensation for second injuries is determined by subtracting the disability caused bythe prior injury from the whole disability caused by the subsequent injury. The Virginia law also has this provision, limited, however, to cases in which both injuries occur

[1] Idaho, Illinois, Maine, Maryland, Massachusetts, Minnesota, New York, North Dakota, Ohio, Oregon, Rhode Island, Utah, Washington, and West Virginia.

[2] Kansas, Kentucky, Missouri, Nevada, South Dakota, and Wyoming.

within the same employment; in other cases the employer is liable only for the disability caused by the second injury.

Eleven States [1] make no specific provision regarding second injuries. It is probable that in some of these States the administrative commissions or courts have ruled upon the question in cases coming before them for adjudication, but no report of any of these rulings has come to the attention of the United States Bureau of Labor Statistics.

Three States [2] grant a greater award for the loss of a second member than for the loss of a first. The objection to this plan is that it does not solve the problem of discrimination. On the contrary, increased compensation benefits for second injuries increase the probability of discrimination against crippled men.

Connecticut attempted to meet this problem by permitting physically defective employees to enter into an employment contract whereby they might waive their right to compensation for injuries due directly to their physical defect. Ohio also recognizes this waiver principle, but only in case of blind employees. Undoubtedly under this scheme many defective workmen are given employment which would be denied them if the employer were to assume the liability resulting from a second injury. Such a plan, however, leaves the handicapped workman unprotected in case of a subsequent accident. As far as he is concerned, the compensation law is to a great extent a dead letter, and in case of injury he will be thrown upon public charity or the generosity of his employer. Some scheme should be adopted which would relieve the employer of the extra-hazardous risk involved and at the same time compensate the crippled workman in proportion to his loss of earning capacity. The special-fund plan already in operation in several States answers this dual purpose.

This plan, limited, however, to disabled soldiers and sailors, has been adopted in France and recommended for adoption in England by a committee of the British Home Office.[3] Under the French law, enacted November 25, 1916,[4] if a soldier or sailor suffering from a serious disability, due to war service, meets with an industrial accident causing death or permanent disability, part of the compensation will be paid from the State fund. The court is required to ascertain (1) whether the accident is exclusively due to the war disability, and if not, (2) whether the permanent reduction in earning capacity resulting from the accident has been increased by the war disability,

[1] Alaska, Arizona, Connecticut, Hawaii, Iowa, Louisiana, New Hampshire, New Mexico, Porto Rico, Tennessee, and Vermont.

[2] Colorado, Iowa, and Wisconsin.

[3] For a summary of the British report, see MONTHLY LABOR REVIEW for June, 1919, pp. 70 to 73.

[4] See p. 218 of this issue of the MONTHLY LABOR REVIEW.

and if so, in what proportion. In the first case the employer is relieved altogether and in the second case he is relieved of a proportion of the compensation payable. This proportion of the compensation is paid out of a special fund created for this purpose and maintained by contributions from employers in the same manner as under the general compensation act.

Another method aiming at the prevention of industrial discrimination against cripples is to prohibit insurance companies from charging employers higher premiums in case they employ disabled men. Minnesota recently enacted a law embodying such a provision. The weakness of this scheme is that it does not cover self-insured employers, who, because of the direct relationship between accidents and compensation costs, would be more inclined to practice discrimination than insured employers. The British committee rejected the plan for this reason.

Provisions for Military Cripples Sustaining Industrial Accidents.

The various schemes enumerated above are concerned chiefly with industrial cripples and are applicable only to States having compensation laws and then only to the employments covered by these laws. But seven States [1] and the District of Columbia have no workmen's compensation laws. Furthermore only one or two State laws cover agriculture and domestic service and one-third do not include the professions, trade, and other nonhazardous employments. Our soldiers and sailors, however, are drawn from every State in the Union and from every walk of life, and this fact must be taken into account in the formulation of an adequate and just compensation system.

Two plans for the prevention of discrimination against the employment of military cripples have been suggested. The first plan provides for a division of costs between the Federal Government and the States, the latter bearing the cost of compensation for that part of the disability due strictly to the occupational injury, and the United States the cost of any disability due to a previous injury sustained in the military or naval service. The second plan provides for the payment by the Federal Government of the entire cost of compensation—not only for the injuries sustained in the line of duty in the military service but for the injuries subsequently sustained in civil life.

The former plan seems to be the more equitable of the two. It was thoroughly discussed at conferences called in 1918 by the War Risk Insurance Bureau and by the Federal Board for Vocational Educa-

[1] North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, and Arkansas.

tion. A committee appointed, as a result of the war-risk conference, after an intensive study of the subject disapproved the plan for division of costs as being impracticable. Despite the equity of the plan it involved insuperable administrative difficulties and furthermore was dependent upon amendatory State legislation before it could be put into operation. Some of the difficulties and complications involved in this plan are: Absence of compensation laws in several States; many employments not covered even in the compensation States; variations in the compensation benefits under the several State laws; variations in the provisions for second injuries; difficulties in determining the respective percentages of disability caused by the first and second injuries; and necessity of amendatory State legislation.

The committee recommended, therefore, as the most practicable method of dealing with the problem, that the War-Risk Insurance Act be amended to provide that any person handicapped by an injury or disease contracted in the military or naval service shall, in case of a subsequent injury in civil employment, be compensated therefor in full by the Federal Government. The weakness of this plan is that payment for injuries by the United States in such cases would not relieve the employer from liability under the State compensation and liability laws. Even if the Federal Government did meet the extra or entire liability the injured employee would still be entitled to receive compensation benefits under a State compensation act and to sue for damages under a State liability act. Apparently the only way in which to relieve the employer of the extra liability without waiting for amendments to State laws is to provide some plan whereby the employers or State funds or the compensation commissions are reimbursed by the United States Government. It would not be necessary, however, to include all compensable injuries in such a plan. Its purpose would be to prevent discrimination due to the fear of greatly increased compensation costs. This increased cost is chiefly due to fatal and permanent disability injuries. Therefore relieve the employer of the costs due to such injuries and the incentive for discrimination will disappear. The employer would still be liable for compensation for temporary disabilities and for medical service. The chief reason for not including temporary disabilities is to curtail administrative difficulties and expenses. If the employer is relieved of liability for major disabilities such a plan will have accomplished its purpose. Under the French plan, also, State compensation benefits are limited to injuries resulting in death or permanent disability.

It would probably be desirable to compensate for all fatal and permanent disability injuries irrespective of the cause of the accident. It may seem unreasonable for the Federal Government to reimburse an employer for an injury which was in no way connected with the

workman's prior disability. For example, a one-armed ex-soldier may have been killed, with other employees, by a boiler explosion. On the other hand, if an inquiry into the cause of every accident is to be made in order to determine to what extent the previous disability was a contributory factor it will result in very great administrative difficulties, the cost of which may more than outweigh the amount saved. In France, in order to protect the fund from unwarranted claims of employers and insurance carriers, it has been found necessary to appoint an expert to investigate whether the accident was exclusively due to a preexisting disability and to what extent the final disability was due to the second accident.

It might be added that the total number of such second injuries in proportion to the total number of all injuries would be infinitesimally small. A computation recently made by the United States Bureau of Labor Statistics [1] would seem to show that of all the employees under the compensation act in the State of Wisconsin who had lost a hand, arm, foot, leg, or eye, only one would sustain a second major permanent disability in any given year. Application of the Wisconsin rate to the 41 State compensation laws in effect January 1, 1919, would give a grand total of 39 second major permanent disabilities for all industries covered by the compensation acts of these States. The increased cost of second injuries would therefore be negligible. Assuming that all second major permanent disabilities would result in permanent total disability, the increased compensation cost of such accidents would in all probability not exceed three-tenths of 1 per cent of the total compensation costs for all accidents under the compensation act.

Reports of Workmen's Compensation Commissions in United States and Canada.

West Virginia.[2]

DURING the year ending June 30, 1918, 3,076 employers having 180,834 employees, full-tim ebasis, paid premiums into the West Virginia State compensation insurance fund. During the same year there were reported to the State fund 23,557 personal injuries, of which 531 were fatal, 10 permanent total, 296 permanent partial, and 22,720 temporary disability. In addition 25 employers having 11,727 employees, full-time basis, carried their own risk. These self-insured employers reported 2,061 accidents, of which 1,971 were

[1] "Probability of an industrial cripple sustaining a second injury," in MONTHLY LABOR REVIEW for March, 1919, pp. 79 to 84.

[2] Condensed Statement of the West Virginia State Compensation Commissioner as of June 30, 1918.

temporary disabilities, 39 permanent partial disabilities, 3 permanent total disabilities, and 48 fatal.

The estimated cost of accidents, present value basis, during the year to the State fund aggregated $2,232,138.62, being $1.20 per hundred dollars of wages, and 85 per cent of the premium income, distributed as follows:

Medical expense	$168,293.40
Funeral expense	33,878.83
Temporary disabilities	376,572.38
Permanent partial injuries	276,102.01
Permanent total injuries	68,992.00
Fatal injuries	1,308,300.00

Nova Scotia.[1]

THE amount of compensation, actual and estimated, under the Nova Scotia compensation act for the year 1918 was $953,917.17. There were reported 7,665 accidents, of which 181 were fatal, 4,382 resulted in temporary disability, and 167 in permanent disability. The large number of fatal accidents (27 per cent increase over 1917) was due to two bad disasters. A coal-mine explosion at Stellarton resulted in 88 deaths and a lumber-camp fire was responsible for 17 deaths.

The report also contains an analysis of the accidents occurring in 1917. The following table shows the number of temporary-disability accidents, classified by nature of injuries:

Number of temporary-disability accidents in 1917, classified by nature of injury.

Bruises, contusions, and abrasions	1,283
Cuts and lacerations	1,026
Fractures	386
Crushes	637
Sprains, strains, twistings, and wrenchings	612
Burns and scalds	237
Punctures	94
Eye injuries	86
Hernias	27
Internal injuries	32
Concussions (brain, spine, etc.)	10
Dislocations	60
All other injuries	13
Industrial diseases	1
Total	[2] 4,504

[1] Report of Workmen's Compensation Board for the year 1918. Halifax, 1919. 33 pp.

[2] Seventy-four of these cases developed sepsis.

Ontario.[1]

THE total number of accidents reported to the Ontario Workmen's Compensation Board during the year 1918 was 47,848. The total number of accidents in which compensation for medical aid was paid was 40,930, of which 382 were fatal, 2,549 were permanent, 25,446 were temporary, and 12,553 were cases requiring medical aid only.

The total amount of compensation awarded during the year was $3,514,648.47. In addition, $369,346.37 was paid for medical aid, not including, however, those industries (Schedule I) in which medical service is furnished by the employer without intervention of the board.

The report also contains a detailed analysis of the accident data under Schedule I for the year 1917. For this class of industries there were reported 25,265 accidents, distributed as follows: Death, 233; permanent disability, 2,297; temporary disability (compensable), 18,468; temporary disability (medical aid only), 4,267.

Of the 18,468 temporary-disability accidents, in 6,964, or 37.7 per cent, of the cases, the disability terminated in from one to two weeks after the accident; in 4,416, or 23.9 per cent, of the cases, the disability terminated in from two to three weeks; in 2,356, or 12.8 per cent, of the cases, in from three to four weeks; in 16 cases the disability exceeded one year.

The number of cases in which the seriousness of the accident was due to blood poisoning was 1,293. This was 6.2 per cent of the total cases.

The number of temporary-disability accidents, classified by nature of injury, is shown in the following table:

Temporary-disability accidents in 1917, classified by nature of injury.

Bruises, contusions, and abrasions	3,924
Cuts and lacerations and punctures	6,610
Fractures	1,883
Crushes	2,341
Sprains, strains, twistings, and wrenchings	1,236
Burns and scalds	1,348
Eye injuries	740
Hernias	32
Internal injuries	11
Concussions (brain, spine, etc.)	35
Dislocations	137
All other injuries	154
Industrial diseases (schedule 3)	17

[1] Report of the Ontario Workmen's Compensation Board for the year 1918.

The following tabular statement shows the accident frequency rate per 100 full-time workers for each of the three years 1915, 1916, and 1917, medical-aid cases being excluded:

Year.	Accident frequency rate (per 100 full-time workers).			
	Temporary disability.	Permanent disability.	Death.	Total.
1915	3.63	0.58	0.12	4.32
1916	4.99	.79	.10	5.88
1917	5.78	.72	.07	6.57

Thus, accidents have been increasing, 1916 showing an increase of 36.1 per cent over 1915, and 1917 an increase of 11.7 over 1916. The death rate, however, has shown a steady decline and the frequency of permanent disabilities for 1917 is less than the corresponding frequency for 1916. The coming into effect of the medical aid provisions on July 1, 1917, added to the number of accidents to be paid for, and even apart from this there are no doubt fewer compensable accidents for which compensation is not claimed than in the early history of the act.

Problem of the Military Cripple in France.

OWING to objections offered by employers to the employment or reemployment of wounded soldiers, or in anticipation of such action, two important problems were early presented to the French National Assembly and Labor Office for solution: (1) The reeducation and readaptation of military cripples, and (2) the industrial status of such cripples.

Among the many objections made by employers were (1) that the reduced physical ability, through wounds or loss of parts, rendered these workmen undesirable for certain classes of labor because of diminished productive efficiency, and (2) that in the employment of a person already partially incapacitated, the employer or insurance carrier would assume extraordinary accident risks.

The unwillingness of insurance funds to assume risks of this character, the objections of certain labor unions, and beneficial, mutual, and cooperative associations to receiving invalided and crippled soldiers as members, led to the adoption of certain remedial legislative measures.

The importance of providing for the reemployment of these wounded soldiers is brought out in a report made public on December

26, 1918,[1] by the under secretary of war, who stated that besides the 76,000 pensioned and definitely retired there were 113,000 of class 1, 374,000 of class 2, and 131,000 of class 3. These figures are exclusive of colonial troops of French birth, Africans and Asiatics, and the 8,300 officers and 438,000 troops reported as being prisoners.

Class 1 includes those permanently incapacitated for future military service and whose incapacity is due to events of the war or an injury arising out of similar compulsory service or to military fatigues or dangers; class 2 includes those similarly incapacitated, but whose incapacity is not due to such service, fatigue, or dangers; and class 3 includes those temporarily furloughed or those whose injuries, by their nature, are considered susceptible of a complete cure and do not of themselves render the persons incapable of future service. Furloughs of this class are valid for one year, while the first two classes are entitled to a permanent pension.[2]

If this vast army of wounded and crippled men are to remain unemployed the economic loss will be incalculable. It is but reasonable to assume that, since their pensions are based solely on the degree of incapacity and are insufficient for maintenance, many of those not absolutely precluded by the severity of their injuries from performing industrial labor will seek employment.

Such employment is a reciprocal necessity. Industry needs these workers, and they demand employment.

Establishment of Special Labor Exchanges.

As an expedient a ministerial circular, dated February 10, 1916,[3] directs that existing labor exchanges put forth extra efforts in securing remunerative positions for invalided soldiers. In regard to the establishment of special labor exchanges the circular says:

> The great danger in the proposed new organization of this kind would be the tendency to produce abnormal wage conditions and possibly to invite conflicts between normal and crippled workmen because of the lower wages paid the latter class. It is also feared that such a course might concentrate the cripples in certain localities in specific occupations or establishments and thus introduce an element of discord between competing establishments, some of which by employing a larger proportion of normal workmen would be placed at a disadvantage as compared with others employing principally crippled workers at wages below the normal.

In view of the actual or probable discrimination by labor unions, mutual associations, and similar societies, and the propaganda for the establishment of such bodies exclusively for cripples, "existing bodies are urgently requested to accept such persons as members.

[1] La Republique Francaise, Dec. 27 and 28, 1918.
[2] Law of April 11, 1831, as amended July 23, 1887. La Droit Pendant la Guerre. Guide Juridique et Practique. 1916. p. 116.
[3] Dalloz. Guerre de 1914, Vol. IX, p. 201.

The organization of separate unions should be looked upon with disfavor, but should impossible conditions preclude the affiliation of the persons partially incapacitated with organizations now existing, and separate organizations become a necessity, their members should be permitted to work with normal workmen and under conditions as nearly normal as possible."

Apparently the circulars failed, to some extent at least, to have the desired effect. A Government order was published February 29, 1916,[1] creating in Paris a national labor exchange bureau exclusively for the benefit of crippled and invalided soldiers. This bureau was charged with the duties usually devolving on labor exchanges and in addition "to investigate methods for the better utilization of those whose capacity for labor has been largely diminished by reason of injuries."

The establishment of this exchange caused a great influx of the wounded and incapacitated in Paris, and the order was soon [2] supplemented by one establishing a subsidiary exchange in each district. It was hoped by this to effect a decentralization, and that through the operation of these local exchanges employment for incapacitated workmen could be obtained in their home districts or in neighboring Departments in which there was a demand for labor. Exchanges were directed to maintain a close and constant communication with one another. The order was suspended five days later.

Preferential Employment of Military Cripples.

Civil service.—As early as April, 1916,[3] the Government adopted the policy of reserving for the injured and invalided since August 1, 1914, a certain portion of positions in the civil service as vacancies occurred, subject, however, to civil-service regulations as to examination, educational qualifications, and physical ability to perform the labor required.

These reservations were amplified by a law of April 17, 1916,[4] and made applicable to invalided class 1. Reservations were made in favor of all such persons, whatever their military grade or length of service, preference being given to heads of families, and the maximum age limit was removed. The law applies to grades of employment not requiring full physical ability. These positions are to be filled by others only when the number of applicants of this class is insufficient.

A ministerial circular of later date [5] states that it is undesirable to limit the employment of these persons to these civil-service posi-

[1] Dalloz. Guerre de 1914, Vol. X, p. 72.
[2] Idem, Vol. X, p. 234.
[3] Idem, Vol. XI, p. 93.
[4] Idem, Vol. XI, p. 112.
[5] Idem, Vol. XIV, p. 191.

tions, and a more extended range of employment is provided for in many auxiliary positions.

One-half of all clerical vacancies are reserved for these applicants, but one-fifth of these are further reserved for persons having performed definite military or naval services.

Industrial enterprises.—All industrial enterprises holding a concession, monopoly, or in receipt of a subsidy granted by the State, Department, or commune are required to reserve to the same class of applicants a certain proportion of positions. All persons employed at the date of their mobilization in any position in the reserved classes of employment shall be reinstated in their former positions or other positions, reserved or not, provided their physical ability permits. This law is to remain in force five years after the date of cessation of hostilities.

The fact that an applicant is in receipt of a pension shall not be considered in fixing the salary.[1] An employee under authority shall, in so far as it is possible, be employed in the same class of work as that performed by him before the war and be paid a wage corresponding to his capacity and the character of work to which he is assigned and not less than that paid like employees. Medical examination is required to determine the physical ability and the exact status in case of industrial accident.

Other reserved employment.—In addition to the positions reserved in the civil service and subsidized enterprises, similar provisions have been made by the city of Paris and the Department of the Seine; the electric light company and the Industrial Association of Paris; several transportation companies; other public utilities; several governmental bureaus; and tramways and railroads.

Reeducation and Vocational Training.

On January 2, 1918,[2] a law was enacted establishing a "National Bureau for Crippled and Invalided" under the supervision of the Minister of Labor. Its purpose is to provide for the occupational reeducation and readaptation of crippled and invalided soldiers and marines. In an effort to encourage and facilitate this work the bureau is to ally itself closely with all public administrative departments.

A fund is appropriated by the State, which may be augmented by other subsidies. Should the bureau be discontinued its funds are to be distributed and its duties transferred to other public bureaus. The law provides that during the period of a soldier's vocational training his family shall be paid by the Government an allowance equal to that formerly paid him while in the service, or if in receipt

[1] Dalloz. Guerre de 1914, Vol. XIV, p. 191. [2] Le Bulletin Legislatif. Dalloz. No. 1, p. 3.

of a pension it, or an increased allowance, shall be continued. In addition to the national bureau, others may be established in the various Departments.

So far the character of legislation considered in this article has been based almost, if not entirely, upon the necessity of maintaining a just industrial status for maimed and partially incapacitated war victims and in assisting them to secure positions providing them with the material necessities of life.

Legislation Preventing Discrimination.

Legislative action, however, has been taken tending to relieve the employer of extra burdens assumed by him in the employment of those who presumably, by reason of preexisting injuries, lesions, and incapacities, inherently increase accident risks in regard to themselves and who also become a potential element of risk to those working in their immediate vicinity or even in the same establishment. Industrial and other enterprises, whether subject to the accident compensation laws or to proceedings under the civil law in the recovery for injuries due to accidents in the course of employment, hesitated in assuming these "extraordinary" risks.

Recognizing the importance of this problem, both from a humanitarian and an economic standpoint, the French National Assembly on November 25, 1916,[1] passed a law providing that the burden of compensation for industrial accident to any person having previously served in the army or navy or in any similar service during the present war, whose physical capacity for labor has been diminished by reason of wounds received or sickness contracted or aggravated by exposure or fatigue in such compulsory service, and who is subsequently injured by reason of an accident due to employment in any of the occupations specified in the industrial compensation laws in effect, shall be determined as follows: The order of the juridical body, operating under the compensation law, in determining the amount of compensation payable on account of the death or permanent reduction of capacity to perform labor by reason of industrial accidents shall explicitly indicate: (1) If the accident under consideration was due exclusively to the preexisting incapacity resulting from military or similar service, or (2) if the resulting permanent incapacity has been aggravated by the fact of the preexisting incapacity, and if so in what proportion.

In the first case the employer, by virtue of the order or judgment of the court, shall be entirely relieved from the payment of compensation due the victim. In the second case he shall be relieved from the

[1] Dalloz. Guerre de 1914, Vol. xv, p. 41.

payment of that portion corresponding to the proportion of incapacity due to preexisting disability.

The general compensation law as amended applies to all workmen and salaried employees in the building trades, factories, workshops, shipyards, transportation by land and water, public warehouses, mining and quarrying, the manufacture and handling of explosives, agricultural and other work in which mechanical power is used, and mercantile establishments. It also applies to State, Departmental, and communal establishments engaged in any of the industries enumerated above,[1] and by law of July 15, 1914, is extended to forestry.[2]

Separate compensation fund.—Provision is made for the establishment of a separate fund for the payment of compensation in cases of second injuries adjudged to be due or partially due to the primary incapacity.

Guaranty fund.—A reserve fund is provided for, which shall be paid into the national old-age retirement fund. It is maintained by means of a surtax, as in the general compensation law, on industrial and commercial establishments subject to the accident compensation law.[3]

The law is enacted so as to cover "every person suffering from serious or permanent incapacity" due to service or exposure.

A decree dated January 2, 1917,[4] designated the solicitor of the comptroller of private insurance as the representative of this fund in all courts having competent jurisdiction and authorized him to perform all necessary legal acts.

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[1] 24th Annual Report of the U. S. Commissioner of Labor, Washington, 1909, vol. 1, p. 685.
[2] Bulletin du Ministére du Travail, 1914, p. 569.
[3] See 24th Annual Report of the U. S. Commissioner of Labor, Washington, 1909, vol. 1, p. 693.
[4] Dalloz. Guerre de 1914, Vol. XVI, p. 7.

SOCIAL INSURANCE.

Report of Pennsylvania Health Insurance Commission.

THE Health Insurance Commission of Pennsylvania, appointed under act of July 25, 1917, has made its report.[1] The commission was directed to investigate (1) the extent, loss, and causes of sickness and accidents of employees and their families not covered by the workmen's compensation act; (2) the adequacy of the present methods of treatment and care of such sickness or injury; (3) the adequacy of the present methods of meeting the losses caused by sickness or injury, either through insurance or otherwise; (4) the influence of working conditions on the health of employees; and (5) methods of sickness prevention—all with a view to recommending ways and means for the improvement of the health of employees and for their protection against sickness and accident.

Because of its limited appropriation ($5,000) the commission was not able to make a comprehensive investigation of its own. Nor did it find time thoroughly to examine the sickness-insurance systems in force in foreign countries or to consider the numerous modifications of these systems which have been proposed in this country. Its efforts were devoted chiefly to collating facts already gathered by public and private agencies. The report presents much valuable data on sickness and its consequences in Pennsylvania, and includes the results of several intensive sickness and industrial surveys made by private organizations.

Although the commission found the problem of sickness among wage workers a serious one, no definite health-insurance measures were recommended at this time. Instead, it was recommended that a new commission be appointed to continue the investigation and particularly to study the proposed and existing systems of health insurance in this and other countries with a view to formulating remedial legislation. The commission, however, believed that "the best way to close this sickness high road to poverty and dependency is to make available immediate and adequate medical care for sickness cases and to prevent the financial burden of sickness from falling entirely on the person least able to bear it—the sick wage worker. In

[1] Report of the Health Insurance Commission of the General Assembly of the Commonwealth of Pennsylvania, January, 1919. 317 typewritten pages.

some way this burden should be distributed among all wage workers, or shared by industry and by the community as a whole." How this distribution should be accomplished, whether by an extension of existing voluntary insurance agencies or by a system based on some modification of the British or other European plans, the commission was not at present prepared to say.

Excerpt of Findings of the Commission.

The investigations of the commission covered the following subjects: Nature and extent of sickness in Pennsylvania; losses on account of sickness sustained by employees, by employers, and by the State; adequacy of present methods of care as regards medical, hospital, and health-insurance facilities; influence of working conditions on health, including a comprehensive study of occupational diseases; and a study of sickness prevention.

Extent of Sickness Among Employees.

There are constantly more than 385,000 employees in the State of Pennsylvania suffering from illness. Of these approximately 140,000 are cases of severe sickness, and 245,000 are cases of less serious illness. The average loss of working time among employees in the State is at least six days each year because of sickness. Pennsylvania stood highest of any State in the Union in the percentage of men rejected for physical reasons in the draft of April, 1917. Of her young men between 21 and 31 years of age, 46.67 per cent were rejected. The average for the country as a whole was 29.11 per cent. Death rates in Pennsylvania are higher than those for the registration area of the country as a whole. The infant death rate—"that most sensitive index to sanitary conditions"—is highly excessive in many parts of the State. It was higher in 1917 in Philadelphia than in New York, Brooklyn, Boston, or Chicago. Pittsburg ranked second among cities of its size, having an infant death rate of 116 per 1,000. The State as a whole had an infant death rate in 1916 of 114 per 1,000, while that for the whole registration area was 101.

Losses Due to Sickness of Employees.

Losses to employees.—The losses to employees consist of (*a*) loss of wages, (*b*) cost of care, and (*c*) reduced earning power and standards of living. At the nominal rate of $2 a day the wage loss to employees of Pennsylvania every year because of illness is at least $33,000,000. The amount spent for needed medical care varies directly with the income of the family. As the family income increases, the amount spent on medical care increases. The average cost of medical care for every employee's family is between $30 and $50 a year. In a

study made by the Visiting Nurse Society of Philadelphia this average was found to be $47. Medical charity given in many instances can not be considered as in any way an ultimate solution of the illness problem in a country claiming democratic ideals. Because most wage earners can not afford to lose time when ill, many develop chronic illness and thus greatly reduce their future earning capacity. This reacts upon society by a direct loss of productive power and prevents the growth of a vigorous citizenship by making it impossible to maintain family standards which permit proper nourishment, care, and opportunity for the children.

Losses to employers.—The losses to employers consist of (*a*) decrease in production due to the absence of sick wage earners or to the lessened efficiency of half-sick workers, and (*b*) cost of labor turnover. Employees in the State lose at least 16,800,000 days' work annually because of sickness, and large numbers of actually sick men and women are at work every day. These facts, while not an exact measure of the loss to industry, give an indication of the extent to which production suffers. During the influenza epidemic anthracite coal production dropped behind 500,000 tons in a few days. There is constant limitation of production because of constant illness, not spectacular and therefore not seriously considered.

Four large industrial establishments state that it costs on an average $30 to $50 to hire and train a new workman. The greater the labor turnover the greater the cost of production; the greater the amount of sickness, the greater the labor turnover. Progressive employers are engaging industrial physicians and nurses, opening dispensaries, and establishing sick benefit funds for practical reasons. It pays to see to it that sick workmen receive care.

Losses to the community.—The losses to the community consist of (*a*) money loss, and (*b*) social loss. The State spends over $6,000,000 every year directly for the treatment of sickness. In addition, $4,000,000 is spent for the maintenance of institutions for the care of defectives, a large part of which expenditure is undoubtedly made necessary by the neglect of sickness and its consequences. Besides the 10 State hospitals for miners, 175 other hospitals reported to the State board of charities in 1916 that 57 per cent of their in-patients had been treated free and 40 per cent of their hospital days had been free days. Illness is not less a burden upon private funds. Aside from the multitude of dispensaries, hospitals, convalescent homes, visiting nurse societies, and other charitable and semicharitable agencies especially for the care of the sick, organized relief societies invariably report illness to be the most frequent disability in the families coming to them for aid.

The loss from illness to the community is not only in money and in reduced efficiency of the employees themselves, but involves the citizenship of the future. Growing children, forced to endure a period of undernourishment because of straitened family resources when the breadwinner is ill; mothers who receive no care during pregnancy, working until the last minute before confinement and as soon thereafter as they can stand on their feet; babies who are not given a fair start in life—all these mean not only a present problem, but a serious and unjust handicap for the generations to come. There is no more important problem to-day than safeguarding the health of the wage-earning woman; not only for her own sake, but for the sake of her children whose task it will be to make real the ideals for which our men have been laying down their lives.

Present Prophylactic Methods.

Facilities for medical care among wage earners are not satisfactory, whether considered from the standpoint of extent, cost, or proportion of persons receiving care in time of sickness. Hospital accommodations in the State average little more than one-half the standard minimum of five beds per 1,000 of population. Even if good medical care were available and adequate most employees could not afford to pay for it. Fees are not large, but wages have not kept pace with the soaring cost of living, save in a few groups. Most employees are unable to save for emergencies. The result is that many of them fail to receive medical care of any sort, and that many more do not receive care until the illness has passed the stage when it could be quickly remedied. Approximately one-fourth of those actually disabled by illness never receive medical care, and a larger percentage of those ill but still trying to work are without attention. The startling number of long chronic illnesses found among the 12,000 people in one Philadelphia survey (53.5 per cent lasting more than one year), together with the low proportion of those ill who are receiving treatment, makes obvious the fact that neglected sick men often become chronically disabled, and that half-sick men are struggling to keep at work because they can not afford to be ill.

Insurance protection against sickness is found among approximately 30 per cent of employees, but seemingly least often among those who need it most. Illness is a thing of chance and most employees take the chance of escaping it. When sickness does come they are stranded, after savings and credit have been exhausted. The lower the wage group the less likely the insurance protection. Nor does the existing insurance in most cases meet the real need. It seldom provides good medical care and cash benefits and is limited by many restrictive rules. From one-half to three-fourths of existing

sickness insurance is carried through the sick benefit funds of lodges or fraternal societies. In most of these organizations sickness insurance is subordinate to life insurance. As a rule, no medical benefits are given and the cash benefit is but $5 a week for 13 weeks in any single year, payable only after a man has been ill for more than two weeks. Trade-union funds rarely afford better protection, while commercial health insurance is costly and subject to many restrictions. Establishment funds usually afford better protection, but are relatively few in number and exist only among the most progressive employers, in whose establishments health hazards are usually reduced to the minimum.

Influence of Working Conditions on Health.

Industry is clearly responsible for a large proportion of the illness among employees. Investigations of the industries of Pennsylvania have shown that no other State has so wide a variety of those industrial processes which carry with them danger to the workers either because of poison in the form of fumes, liquids, or dusts, or because of mechanically irritating dusts which injure the throat and lungs. Seventy-nine per cent of all the deaths of persons of working age in 1916 were from diseases whose connection with important Pennsylvania industries has been established. Death rates among persons of working age in Pennsylvania from degenerative diseases due in large measure to certain kinds of occupations are steadily increasing. A special report on the occupational disease hazards in the State, printed elsewhere in this issue of the LABOR REVIEW, (pp. 170 to 180), was made by Dr. Alice Hamilton.

Sickness Prevention.

Fully one-half of existing sickness could be eliminated if proper preventive measures were taken. At present from 70 to 75 per cent of the school children in Pennsylvania are physically defective and for the most part the defects are correctible if treated in time. A large number of communities in the State have no active health work, much less an adequate appropriation for health activities. Nothing so stimulates preventive effort as definite responsibility for the losses entailed. Preventive measures proved inadequate to meet the problem of industrial accidents until stimulated by the enactment of workmen's compensation laws.

Conclusions.

The responsibility for illness rests upon three groups: The community, industry, and the individuals. At present these three groups are meeting the losses from illness in wholly unequal shares; the

burden on the individual is often disastrous and out of proportion to his individual responsibility. Some means of a just distribution of this burden should be found. There is in Pennsylvania to-day urgent need for a program of health measures which will (*a*) provide for the efficient care of employees and their families when actually ill, and (*b*) provide preventive measures which will, in so far as it is possible, prevent illness and increase the opportunity for health and vigor in the citizenship of the State.

Special Investigations and Surveys.

The following special investigations and surveys, the results of which were incorporated in the commission's report, were made for or by the commission.

(1) *Kensington sickness survey.*—A sickness survey was made by the students of the Pennsylvania School of Social Service in Philadelphia, in May and June, 1918. This was a house-to-house canvass of 743 families, consisting of 3,198 persons, in a census enumeration district in Kensington (Philadelphia), carefully selected to insure its representative character. The primary purpose was to get the illness history of these families for the year ending April 1, 1918, but the cases of sickness existing at the time of the survey were also noticed.

(2) *Sickness and dependency.*—A study of 1,500 families, in which illness was a problem, under the care of the charity organization societies of 10 cities in the State during 1917. This study was made by the societies and tabulated by the commission and by the students of the Carnegie Institute of Technology.

(3) *Sickness history of working girls.*—A study of 502 members of Y. W. C. A. industrial clubs in 17 cities of the State. This covered the illness histories of these working girls for the period June, 1917, to June, 1918. Wage figures and occupations for 1914, before the war, were obtained for comparative purposes. This study was made by the association secretaries and tabulated by the commission.

(4) *Sickness history of wage earners' families.*—A study of 500 families given nursing service in July, 1918, by the Philadelphia Visiting Nurse Society. The families were not limited to a particular group, but were chosen consecutively. The illness at the time of the visit was disregarded, but the sickness history of the preceding year was obtained. This study was made by the nurses of the society and tabulated by the commission.

(5) *Sickness history of wage earners.*—A study of the fatal illnesses of the fathers of families now under the care of the mothers' assistance fund in Lancaster and Lackawanna Counties. This study was made by the agents of the fund and tabulated in the office of the State supervisor, Harrisburg.

(6) *Philadelphia sickness survey.*—A sickness survey of Philadelphia and vicinity was made in 1917 by nurses from the city bureau of health, under the direction of the chief of the bureau of vital statistics. The study included 12,019 individuals in 2,655 different families, and covered all sickness existing at the time of the survey, and duration to date. The investigation was painstakingly made and in view of the precautions taken it is assumed that the sickness rate is reasonably accurate, although the time of the year, August and September, was one in which sickness is at a minimum.

(7) *Western Pennsylvania sickness survey.*—A study of sickness conditions in the principal cities of central and western Pennsylvania, including Pittsburg, was carried on in 1917 among industrial policy holders of the Metropolitan Life Insurance Co. The enumerators were the regular agents of the company, who gathered the survey facts in the course of their door-to-door collections. The study was made in March, a time of the year when physical disability on account of disease is probably at its maximum, and covered 328,051 persons, a much larger number than was reached by the Philadelphia survey, but only serious cases of sickness existing at the time of the survey were noted.

(8) *Health hazards in industry.*—A study of occupational diseases in Pennsylvania prepared in November, 1918, especially for the commission, by Dr. Alice Hamilton, of the United States Bureau of Labor Statistics. Also a study of 100 factories in the Pittsburg district made during the summer and fall of 1918 by the women in industry division of the council of national defense of Allegheny County.

(9) *Existing insurance facilities.*—A special study of the sick benefit funds of the Pennsylvania Railroad and several large industrial establishments in Pennsylvania, made by the commission in cooperation with the Ohio Health and Old Age Insurance Commission. Also a brief study of existing commercial insurance companies and trade-union and fraternal sick benefit funds in Pennsylvania, made by the commission.

Cost of Health Supervision in Industrial Establishments.

THE following table summarizes the experience of 99 industrial establishments in the United States as regards the cost of health supervision in 1916:[1]

COST OF HEALTH SUPERVISION IN VARIOUS INDUSTRIES IN 1916.

Industry.	Number of establishments represented.	Total average number of employees supervised.	Total cases of all kinds.	Total medical and surgical cost.	Average annual cost of medical and surgical supervision per employee.
Metal trades	47	294,646	1,988,991	$541,771	$1.84
Rolling mills	7	49,317	358,574	137,047	2.78
Smelting and refining	1	1,270	2,832	6,932	5.46
Light and power	7	24,921	49,046	92,601	3.72
Transportation	5	35,795	81,591	69,633	1.95
Chemicals	6	10,572	78,744	34,797	3.29
Food	5	13,650	69,565	39,875	2.92
Rubber	5	27,462	234,069	76,089	2.77
Textiles	4	8,939	67,380	24,177	2.70
Paint	2	4,023	10,255	29,635	7.37
Leather	2	3,026	9,440	6,102	2.02
Publishing	2	3,358	6,742	3,473	1.03
Coal mining	1	2,454	2,842	4,637	1.89
Gold mining	1	2,500	62,126	35,590	[1] 14.24
Coal and iron mining	1	11,000	131,898	130,000	[1] 11.82
Miscellaneous	3	2,611	11,019	6,126	2.35
Total	99	495,544	3,165,114	1,238,485	[2] 2.50

[1] Cost includes treatment for sickness of employees and their families when requested.
[2] The average annual cost per employee, excluding plants for which the cost includes sickness treatment of employees and their families at home, was $2.21.

The purpose of this compilation was to inform employers of the actual cost of health supervision of employees in different industries. To this end the data were secured from plants engaged in many industries, in light, medium, and heavy work, in comparatively safe as well as hazardous operations, and in shops of various sizes and character, located in various parts of the United States. Some are situated in cities where hospitals and specialists are available, some in small places where such service can be secured only with difficulty.

While the average cost per person, as indicated in the summary, is $2.50, it is not representative, as the total cost on which the average is based includes that of four plants which render unusual service, giving both medical and surgical attention to their employees at the plant and in their homes as well, besides assuming the medical care of employees' families. Omitting these four plants from consideration, the average cost for the 479,634 employees in the other 95 plants was $2.21.

[1] "Cost of health supervision in industry," by Magnus W. Alexander, in Modern Hospital for May, 1919, pp. 376, 377. Chicago.

Where the average cost appears to be unusually high or low, the reason is in many cases indicated in the table itself. The size and character of the medical staff is usually the determining factor. In some cases, the cost is influenced greatly by the number of injuries treated in private or public hospitals, in others by the amount of care given to all injuries, serious or slight, or by extension of the service to include physical examination of all employees, treatment of sickness of employees at the plant and at home, and even by medical care of employees' families, or by a combination of these features.

The cost is also influenced, of course, by the kind of work done in particular plants and by the character of the industry. Shops doing very light work, with little hazard exposure, naturally have fewer and less serious accidents than those doing heavy work, particularly where many men work in elevated positions, as in the power and light industry. The cost in plants manufacturing chemicals and paints reflects the great care exercised to safeguard the health of workers in those industries.

A total of 3,165,114 cases was reported, an average of more than six cases per person employed, at an average cost of 39 cents per case. The number of cases reported, however, does not include all of the service rendered. In many plants, no record is kept of slight injuries, of injuries redressed, of medical cases treated, of home visits made, or of physical examinations. In others, even the most trivial cases are counted. Furthermore, as "cases" are so varied in gravity and in the time required for treatment, any comparisons of costs per case are not of much value.

The "total medical and surgical cost" includes salaries of physicians and nurses, cost of outside medical and surgical service and cost of medical and surgical supplies, whether or not paid for by insurance companies as a part of the insurance contract; it excludes compensation for injuries, overhead expenses, and wages paid to employees while off duty to have their injuries treated.

LABOR LAWS AND REGULATIONS.

Labor Legislation in Canada, 1919.

THE April number of the Canadian Labor Gazette reproduces a portion of the recent labor legislation of the Provinces from which the following digests are made.

Industrial Conditions Act of Manitoba.

Of special interest is the Industrial Conditions Act of Manitoba, assented to March 14, 1919, and put in operation on the 29th of the same month. The act goes beyond the well-known Industrial Disputes Investigation Act for the Dominion in its provision for the adjustment of industrial disputes, creating a joint council, subject to statutory control. This council is a provincial agency, and consists of two representatives of employers, two of employees, and one of the public, who shall be the chairman. Appointments are to be made by the lieutenant governor in council on nomination by organizations of employers and employees, as far as representatives of the respective groups are concerned. Appointees are to hold office during the pleasure of the lieutenant governor, and shall receive such remuneration as he may decide. The council is to maintain an office, but may hold its meetings at any place which it may deem advisable.

It is the duty of the council, either on complaint or on its own motion, to investigate existing or threatened industrial disputes and to make a public report thereon; but no decision shall be published until after a duly advertised public hearing at which the parties interested and the public shall be free to appear. The council may also investigate from time to time the cost of living, and may publish monthly reports thereon. If any necessary commodity or service appears to cost more than is fair and reasonable a special investigation and report may be made; also where there is reason to believe that unfair profits are being made by any employer or group of employers by the maintenance of an unduly low rate of wages. Housing, sanitation, educational and recreational opportunities, labor supply, the shifting of employment, and apprenticeship are among the subjects named as within the purview of the council. It is also charged to encourage the organization of workers and have regard to their interests in general. Breaches of contract, oppressive or discriminatory acts of employers, and violations of labor laws are other subjects upon which it may act.

The council has the powers, rights, and privileges of a court, including the compulsory attendance of witnesses and punishing contempts.

Minimum Wages Acts of Quebec and Saskatchewan.

Quebec and Saskatchewan follow Manitoba in the establishment of boards for the fixing of wages of female employees. Alberta also has a limited statutory determination of wage rates in factories, shops, and offices.

The Quebec board or commission consists of the deputy minister of labor or other representative of the minister of public works and labor, and two appointed members, one of whom may be a woman. Appointments are made by the lieutenant governor and may terminate at his pleasure. No compensation is provided for service, but a secretary may be employed and necessary expenses met. The commission may investigate the conditions of employment of women in industrial establishments, with power to examine books and pay rolls and hear witnesses. Conferences in which employers and employees are equally represented, together with disinterested persons, and a member of the commission, who shall preside, may be called to fix a minimum in any industry in which it appears that the wages are inadequate. If the commission approves, the wage becomes effective after 60 days from its publication unless delayed by order of the commission.

Special rates may be fixed for substandard workers and for girls under 18 years of age. The payment of wages less than the minimum gives grounds for suits for balances as well as fines.

The law was assented to March 17, 1919, to come into effect the same day.

The board in Saskatchewan consists of five persons, two of whom shall be women, appointed by the lieutenant governor in council for such terms and at such compensation as he may determine. Its powers extend to wages and hours of labor for females employed in shops and factories in any city of the Province, or to such area outside a city as it may determine. Its investigative powers are the same as for the Quebec commission, and it may also punish for contempt. The bureau of labor is directed to cooperate with the board in securing desired information. Orders are made by the board without a conference, and go into effect 30 days after publication.

The provisions for learners and substandard workers and for the recovery of unpaid balances are the same as in Quebec, with an added provision for the protection of employees giving testimony before the board.

The law was assented to on February 5, 1919, to come into effect May 1, 1919.

Labor Legislation in Porto Rico, 1917.[1]

AN appendix to Volume II of the Laws of Porto Rico, 1917, contains the acts and resolutions of the first session of the ninth legislature. One of these acts, No. 91, promulgated on March 31, 1919, relates to the payment of wages. It provides that wages must be paid in United States money, and that any stipulation for payment other than in such money is void. When wages are paid in advance discounts may be made. Contracts naming a place or prescribing the manner in which wages are to be expended, or requiring the employee to live on the employer's property, are null. Employees may not be discharged for having spent their wages in any determined place or manner, or with any determined person. Wages are payable weekly. Employees quitting or discharged during the week are to be paid the following Saturday. In actions for recovery of wages, the defendant may not file any counterclaim or set-off for merchandise furnished. Judicial action for the collection of bills for merchandise delivered to employees by employers "on account or for the amount of their wages" and "deductions for any reason" other than advances in legal tender are prohibited.

Act No. 92, also promulgated on March 31, 1919, relates to the protection of new industries, and defines such industries as "those which on a small or large scale are absolutely new because none other manufacturing products of the same class, whether or not the raw material is produced in Porto Rico, such as cement, cotton fabrics, wool, silk, hemp, sisal, sansevaeria, rope, majigua, oils, paper, china, crystal, glass and other similar factories, including container and package factories not existing in Porto Rico, has been established or exists in Porto Rico." The act provides that "such industries, factories or mills shall be exempt from all taxes for a period not exceeding ten years, as the public service commission may determine."

Accident Compensation Laws in Mexico.[2]

SEVEN States of Mexico have enacted laws concerning accidents to laborers, namely: Nuevo León, Sonora, Vera Cruz, Zacatecas, Hidalgo, Chiapas, and Yucatan. The law of Nuevo León dates from November 2, 1906, of Hidalgo from 1915, of Zacatecas from 1916, of Yucatan from 1917, and those of Sonora, Vera Cruz, and Chiapas from 1918. Among other benefits, the law of Nuevo León establishes

[1] Porto Rico. Acts and resolutions of the first session of the ninth legislature. Appendix to Vol. II of the Laws of Porto Rico, 1917. [San Juan], 1919. 38 pp.

[2] Reprinted from Bulletin of the Pan American Union, March, 1919, p. 347. Washington.

the following: For death, the payment of the entire wage for 2 years, 18 months, 1 year, or 10 months, according to the amount of debt left by the deceased; for total incapacity, the payment of the entire wage for 2 years; for partial incapacity, either temporal or permanent, the payment of from 20 to 40 per cent of the wage for 2 years, 1 year, or 6 months. The law of the State of Hidalgo establishes in case of death the payment to the heirs of 50 per cent of the salary or wage for 3, 2, or 1 year, according to the debts the deceased may have contracted; in case of perpetual incapacity a sum equal to the salary or wage for 1 year and work of which the injured man is capable must be supplied. According to the law of Vera Cruz in case of death the sum of 1 or 2 years' wage must be paid to the heirs; in case of permanent incapacity an amount equal to the wage for 4 years or a life pension equal to half the wage earned by the laborer at the time of the accident must be supplied; in case of partial incapacity a sum equal to 2 years' wage or a life pension equal to a quarter of his wage is obligatory. The ruling in Yucatan is that in the first and second cases cited payment shall be made of a sum equal to the salary of 2 years; and in the third event labor must be provided for which the victim is capable or his full wage of 1 year be paid. The law of Chiapas concedes to laborers and their employers the right of agreeing upon the amount of the indemnities and the terms of payment. In Sonora the general manner of the payment of indemnities in case of deaths or total or partial incapacity is established as well as the penalty for minor accidents, such as the loss of a finger, in cases where the injury was the direct result of the work in which the victim was engaged or was caused by lack of proper precautions and safeguards on the part of the employer.

Laws for Maintenance of Industrial Activity During Demobilization in France.

LAWS and official documents relative to the maintenance of industrial activity during demobilization is the title of a collection of laws, decrees, and other measures taken by the French Government between November, 1918, and January 26, 1919, relative to discharge of employees in the service of the Government, and to securing employment for the demobilized.[1]

These measures are presented under the following heads: (1) Contracts of labor (valid after the war); (2) securing labor for male persons after their discharge; (3) census of unemployment, and qualification

[1] France. Ministère du Travail et de la Prèvoyance Sociale. Direction du Travail. Actes et Documents Officiels. Mesures tendant à maintenir l'activité nationale pendant la demobilisation. Paris, 1919. 72 pp.

of persons about to be discharged; (4) female labor; and (5) municipal and Departmental unemployment funds.

The length and number of these measures preclude anything but the briefest review here.

The law of November 22, 1918, guaranteeing the validity of labor contracts after the war, provides that "contracts for labor for a determined period are valid for that portion of the time contracted for and remaining at the time of mobilization," and that "all contracts, whatever may be the term agreed upon, made during the war, in which a mobilized person was replaced, expire at the time the former employee is reinstated. In reinstatements preference is given to the oldest contract." The act is applicable to men mobilized for naval or army service and to communal and Departmental officials and employees in public establishments.

In a circular of November 13, 1918, measures are recommended for the prevention of a too rapid demobilization of workers in factories under Government control, and for the early release of farm labor. Other circulars provide for the release of persons working in such factories, upon proof that work is assured them in other establishments, and advising the immediate discharge of all persons over 65 years of age temporarily employed.

The Government advises the establishment of commune funds for the purpose of giving aid to the unemployed during the necessary delay in securing employment, and agrees to share the expense so incurred to the extent of 33 per cent. This rate was subsequently increased so that from January 15 to November 15, 1919, the State will bear 75 per cent of the expense.

As to the women employed in industrial war work, administrative officers were directed to proceed as slowly as possible in all cases of discharge, and in dismissing workers to give preference in retaining in employment to (1) those who have dependent families, and especially to widows whose former residence was in the occupied districts and who have dependent children under 16 years of age, wounded members of the family, and dependent ascendants, and in case of there being an equality as to dependents preference is to be given to widows and orphans of soldiers, and (2) by seniority of service.

Each female employee in the administrative service is granted at the time of her discharge a bonus equal to 25 days' or a month's pay according to whether employed by the day or month, provided she had been in the service 6 months on November 11, 1918. Female employees who had been in the service less than 6 months but 3 months or more are granted one-half this bonus. Those who had served more than 6 months are entitled to 2 days' extra bonus for each 3 months' service over 6. The bonuses are payable at the time

of discharge, provided the employee agrees not to enter any other public service. Those who fail to make this agreement are not paid the bonuses until the expiration of the period to which they correspond, and then only for that portion of the period during which they were unemployed.

In State industrial establishments the bonus is equal to 30 days' wages to those employed at least 3 months before the armistice was signed, increased by 1 day's work for each 4 months of service in excess of 3.

In factories engaged in the manufacture of munitions of war a discharge bonus and traveling expenses for herself and her children to the place she elects is granted to each female employee resigning from the service before December 5, 1918, later extended to December 15, 1918, and in meritorious cases to January 15, 1919. Circulars dated November 25 and 26 declare that, owing to the impossibility of securing employment in other factories and shops, and to the desire to reduce the manufacture of materials in State establishments preparing explosives, it has been decided to reduce the hours of work to five per day with a corresponding decrease in wages, and a readjustment of cost-of-living bonuses. The taking on of new employees in the office of the Secretary of War was abandoned December 17, 1918, and in case additional labor becomes necessary, it is to be recruited from persons discharged from establishments engaged in the manufacture of explosives.

A circular issued by the Minister of Reconstitution, dated December 28, 1918, provides that when certain industrial establishments allow discharge bonuses the State will reimburse the establishment, within certain limits, as follows: The State will pay one-third of such bonuses paid to the first one-third of the employees discharged, one-half of the bonuses paid to the second third discharged, and two-thirds of the bonuses paid to the last third discharged. A subsequent circular, in noting that some employers were discharging employees without granting any discharge bonus, directs that the State assume the charge of paying in such cases an indemnity amounting to 140 francs ($27.02) to all persons over 18 years of age. This provision was somewhat modified by a later order providing that in all cases where an establishment in the Paris district allows a bonus of 200 francs ($38.60) the State will assume the payment of one-half the amount, and also extending the bonus to persons under 18 years of age who may be considered heads of families, or who have dependent brothers or sisters, or certain other dependents.

Proposed Codification of German Labor Laws.

ACCORDING to the Soziale Praxis[1] Herr Landsberg, the German minister of justice, on March 1, 1919, announced to the National Assembly the intention of the Government of preparing a German labor code. In making this announcement the minister said:

Some time ago the cabinet resolved to have the ministries interested prepare a labor code. It is intended that this code shall fulfill all those demands on which the workers of all trade-union movements have come to an agreement. The code will be governed by a social and liberal spirit, and shall demonstrate that German democracy will be active not only politically but also socially. The code shall in the first place create a right of combination (*Koalitionsrecht*). Hitherto Germany has not possessed the right of combination, at least not positively. From now on this most valuable right of the worker shall not be contained in a negative sentence. The code shall, moreover, do away with the legal incompetence of trade unions. It does not seem right that trade unions which have a membership of millions and own property worth millions are not able to bring suit in the courts. The proposed codification will also improve the law on conciliation and arbitration, and develop a system of shop councils (*Betriebsräte*) which shall exercise considerable influence on the process of production, but only on that and not on the financial management of the establishments. These shop councils shall become the constitutional organs of the worker. In preparing this labor code the Federal Government will of course consult workers of all trade-union movements as well as employers, and it expresses the hope that the German workmen will bring good will and zest to the collaboration, so that the proposed code may become the Magna Charta of German labor.

New Regulation of Agricultural Labor in Germany.

UP to November, 1918, the labor contract of German agricultural workers was governed by the various State laws regulating domestic service. In November 1918, the Provisional Government abrogated all these oppressive laws without enacting substitutes for them. Thus, for the time being, the employment of agricultural labor was subject only to the antiquated regulations of the Civil Code (arts. 611 to 630.) In order to remedy this situation the largest agricultural employers' and workers' organizations on January 24, 1919, agreed upon a provisional agricultural labor ordinance, which was given legal character by a decree issued by the people's commissioners and by the minister of labor.[2] The most important provisions of this lengthy ordinance are the following:

In establishments directly or indirectly connected with agriculture or forestry, in which a collective agreement is not in force, labor

[1] Soziale Praxis und Archiv für Volkswohlfahrt, vol. 28, No. 23. Berlin, Mar. 6, 1919.

[2] Soziale Praxis und Archiv für Volkswohlfahrt, vol. 28, No. 19, pp. 309 ff, Berlin, Feb. 6, 1919, and Kolnische Zeitung, Cologne, Feb. 1, 1919, morning edition.

contracts for a period exceeding six months must be concluded in writing if any of the remuneration agreed upon is to be given in kind.

The maximum daily hours of labor are to average 8 for four months, 10 for four months, and 11 for the remaining four months. Overtime must be specially paid for. The time spent in going to and coming from work is to be included in the working hours, but neither rest periods nor the time occupied in feeding teams of draft animals. During the six summer months a daily rest period of at least two hours must be granted.

That part of the wages which is payable in cash must as a rule be paid weekly. Unless a different local custom prevails, wages payable in kind must be delivered quarterly in goods of medium quality or the worker must be compensated for them in cash at the official market value. The labor contract must state the cash value of the right of the worker to housing, the use of land and of other grants in kind. Disputes relating to remuneration are to be decided by an arbitration board. In case of unlawful termination of the labor contract the employer may not retain wages in excess of 45 times the customary local daily wage. Labor contracts for a year are to be calculated for the various seasons on a wage scale by which the winter wage is not strikingly disproportionate to the work done in that season and the wages paid for the whole year.

Remuneration for each hour of overtime must amount to at least one-tenth of the customary local daily wage plus 50 per cent bonus. The time spent in feeding and looking after animals is to be paid for as overtime in the case of workers for whom such work is not included in the general stipulations of their labor contract. Urgent work on Sundays or holidays is to be paid at double the customary local daily rate of wages.

In establishments in which a workers' committee exists, working regulations must, after consultation with the committee, be issued and posted in a conspicuous place. These regulations shall fix the hours of labor, possible fines, and the use of such fines for the benefit of the workers.

Women workers who have a household to look after must be released from work at least one hour before dinner time. On the day preceding Christmas, Easter, and Pentecost they are to be excused from work. Women with large houses to look after, and especially those who board lodgers, are, save in cases of emergency, to be compelled to work only so far as their household duties allow.

The workers are to be supplied with housing accommodations corresponding to moral and hygienic requirements and to the size of the families housed.

Assault, gross insults, immoral demands, refusal or gross neglect of service, unpunctual payment of wages, and continued bad board or unhygienic housing shall be considered valid reasons for the immediate termination of the labor contract. Participation in political or trade-union activities shall not be considered a reason for discharge.

In case the labor contract of a worker with a household is terminated prematurely without his fault he shall for three further weeks be entitled to the free use of the housing accommodations granted to him. If the worker was at fault he is entitled to only two weeks' use of the housing accommodations and shall pay rent for them. In case of premature termination of the labor contract the worker is to be given a share of the crop on the land granted to him by the employer equivalent to the work done by him on the land and based on its average yield. Disputes over premature termination of the labor contract shall be decided by an arbitration board.

Pensions of any kind, especially pensions for soldiers disabled in the war or survivors' pensions, are not to be deducted from the wages of workers. Whether disabled workers are receiving a wage corresponding to their earning capacity is to be decided by the arbitration board.

The worker is to enjoy the benefit of any statutory labor conditions more favorable to him than those provided in his contract.

The decree of December 23, 1918, relating to collective agreements, arbitration boards, and workers' committees shall also be applicable to agricultural workers coming under the present ordinance.

The above provisional ordinance is to be legally valid until the issue of final labor regulations for agricultural workers by the National Assembly.

HOUSING.

Housing and Community Problems at National Conference of Social Work.

THE fact that housing was upon the program of only two of the ten sections meeting at the Forty-sixth Annual Conference of Social Work convened at Atlantic City, N. J., June 1–8, by no means adequately registers the interest of the convention in the problems of housing. There was a general understanding of the acuteness of the actual shortage in houses, coupled with a widespread belief that there was danger of a setback in the quality of housing by reason of this quantity shortage.

Community Problems.

The larger emphasis of the conference was, however, upon matters of community interest, particularly the extension of the war-time community service into the period of reconstruction and afterward. Some very interesting experiments showing the need and value of community recreation have been undertaken during the war. The beneficial effect of the work upon war morale, its influence upon health and general happiness, were strikingly brought out in various talks and discussions. Mr. L. A. Halbert, of Community Service, Inc., and others, who touched upon the subject, emphasized the desirability of continuing the work as a peace-time instrument of social reform. The uplifting effect of good standards of health, housing, and recreation was strongly dwelt upon by Mrs. Eva White of the United States Department of Labor. In describing the details of community service organization in Chester, Pa., Mr. Charles F. Weller, executive secretary of that organization, termed its effort as one of "social salvage," and continued: "Community service is uncovering rich hidden streams of human power; discovering and coordinating great groups of worth-while people who have previously been unregarded and unenlisted; organizing into joyous helpful community relationships large numbers of men and women whom their neighbors are surprised but glad to recognize as richly individual, public-spirited, worthy comrades."

Mr. Gibney, director of community recreation centers, Board of Education, New York City, told how the school system of New York City is reaching the neighborhood through local community organiza-

tions. The method is as informal as possible; responsibility is given to the locality, but the uniformity is maintained through the granting of a prescribed form of charter by the Board of Education to each local group desiring to organize. One of the principal difficulties connected with operating the local community organization is one of parliamentary tactics, so to speak, connected with securing a proportionate voice of the minority in the conduct of the meetings.

Mr. John Collier, associate secretary National Committee for Constructive Immigration Legislation and director of Training School for Community Workers, New York City, analyzed the philosophy and purpose of the community councils which have developed in New York City. He termed them extragovernmental bodies in which the members of a locality meet to discuss economic and political problems of immediate concern to them. While these councils partake very much of the character of the New England town meeting, they differ in the respect that each is autonomous. They combine sociability and familiarity of the members one with another as did the New England town meeting, but in their demonstration they require greater technical and objective knowledge than did the informal New England town meeting. The community councils are distinctly middle-class institutions and have captured the support of the laboring men as a whole. In their discussions they are tackling economic problems primarily—the cost of living, rent profiteering, and the like.

The community councils come together in a sort of a community parliament in the municipal building and discuss problems of common interest to them. The councils are supported by dues and entertainments of various sorts, and require an annual income of $50,000 for overhead expenses arising from voluntary gifts. This latter expense, it is hoped, will be later on absorbed by the borough governments, contributing pro rata.

The question of maintaining and supporting the various types of recreational community activities was one which probably raised more discussion than any other. Can this work be done without subsidies, philanthropies, or government aid? Mr. James Ford, of the United States Housing Corporation (Department of Labor), and professor of social ethics at Harvard University, contributed the principal address to the discussion of this point. He showed how education and recreation should be and as a matter of fact have been combined in self-governing and self-supporting community houses. He instanced the cooperative methods in Europe as doing this very thing, and at various points in this country this is also the case—e. g., the labor schools in New York City, Boston, and other places. He emphasized the value of the cooperative movement in the provision of educational and recreational facilities, as implying

equal distribution of responsibility and as being more responsive to the various needs of the members, giving greater opportunities for choice of the form of amusement or education. The cooperative method gives valuable experience in operating business enterprises, amounting as it does to the exercise of considerable judgment.

Housing.

The housing experience during the war, as outlined by Mr. John Ihlder, secretary of the Pennsylvania Housing and Town Planning Association, pointed to the danger arising from bringing into use unfit, insanitary dwellings to meet the shortage in accommodations. On the other hand, there stood out the fact that the housing shortage was beginning to affect comparatively well-to-do persons. As a result of this, the country is being roused from its conservatism and lack of knowledge of the housing problem. This arousing of interest in the problem is a hopeful sign that the anticipated increase in sickness and other social problems from the use of insanitary dwellings may not take place. Thus the housing problem has ceased to be a class problem peculiar to the workingman, and has become a universal one.

The indications of interest in housing on the part of other classes are rent strikes and suggestions as to the control of speculation and land values and as to forms of taxation. Some cities, in fact, are beginning to propose municipal ownership.

Future developments in housing require that there be kept in mind two important phases: Intelligent management and maintenance of minimum standards. Maintenance of minimum standards or the provision of good houses means to the tenant a relatively better house for his money and to the owner reduced charges for upkeep and the like.

Mr. Lawrence Veiller contributed a special paper to the discussion of minimum standards. He outlined briefly the standards set up by the Federal Government and recounted the past struggle to get recognition for the fixing of housing standards by law. He particularly scored the architects for their failure to recognize the meaning and purposes of standards, insisting that they were still in the days of winding stairways and oblivious to the need of erecting houses into which standard furniture will fit and in which household equipment can be used to the best advantage. Thus far, the women, he pointed out, have not taken a hand in the matter.

Discussions of the above papers threw light on what was occurring in England, particularly the part which women were playing in securing the raising of housing standards in that country. The chief difficulty there, it was pointed out, was that the women had

not become articulate in such matters. This brought the assertion that workingmen in this country, either in their organized or unorganized capacity, were not taking nor had they taken any particular interest in the housing problem. It was also asserted by another speaker that people in the better apartment houses were less careful in insisting on rooms in apartment houses being properly lighted and ventilated than were the poorer classes of tenants who sought rooms in tenements of the lower grade. The speaker felt that there was need for educating all women in respect to housing, not merely those at the bottom of the ladder but also those at the top.

In treating the subject of how to manage industrial villages, Mr. F. C. Feld, rental manager of Yorkship Village, the Emergency Fleet Corporation town near Camden, N. J., distinguished between the village belonging to a company or industrial establishment and one not connected with such an enterprise. In the latter case the element of competition enters in. This frequently tends to lower the standard of living, as tenants invariably move into the cheaper though less sanitary dwellings. In this case also the question of recreation is not one of importance.

On the other hand, the company town, being isolated, must take into consideration matters of recreation. This is true even in the case of Yorkship Village, which, although a portion of Camden because of its location between two branches of Newton Creek, is to a certain extent a separate community. It is expected to organize the community center work with a large degree of cooperation on the part of the tenants.

The successful operation of the community depends primarily upon continued occupancy of the houses, and secondarily upon maintenance. Perhaps the two features are of equal importance. The speaker was of the opinion that particular care should be exercised in the selection of tenants and in weeding out the undesirables after effort has been made to secure their cooperation in proper living. The evils of improper maintenance arise principally from the fact that discontented tenants fall into habits of carelessness and lose interest in the upkeep of their houses.

It is recommended that rents should be collected at the home rather than by payments at the office. This gives opportunity for cultivation of the confidence of the family and also, without seeming to interfere with the rights of the tenant, for making suggestions toward the maintenance of proper living conditions. Special periodic inspections are thus obviated and also the undesirable feeling on the part of the tenant of being inspected. It is highly undesirable to deduct the rent from wages, as it tends to make the tenant dependent and to destroy his sense of responsibility. It is also believed that

women should be employed as rent collectors, as being most liable to secure the goodwill of the housewives with whom they must deal. The success of women rent collectors is clearly brought out in the experience of the Octavia Hill Association of Philadelphia.

Before the section on health, Dr. James Ford, of the United States Housing Corporation, contributed a paper in which he discussed the structural arrangement of the house as contributing to ill health, treating such matters as light, ventilation, excessive crowding and personal contact, imperfect equipment, general situation of the house, the effect of uncongenial environment upon the individual and his consequent inability to resist the invasion of disease. This paper is printed in full, immediately following this article.

Mr. Thomas Adams, housing and town-planning adviser to the Canadian Government, outlined the reconstruction housing program of the Canadian Government. His address appears on pages 248 to 255 of this issue of the LABOR REVIEW.

Bad Housing and Ill Health.[1]

By Dr. James Ford, United States Housing Corporation.

DURING the two years of our participation in the war attention has been called more than ever before to the subject of housing. This was due primarily to the fact that during the war there were not houses enough in our industrial centers to accommodate the industrial workers brought in to manufacture munitions, build ships, or engage in other essential industries. This shortage was met only in part by the relatively meager appropriations of the Federal Government to provide housing for war needs. Houses were built by the Government in very few cities, and private capital did not engage largely in the construction of dwelling houses because of the difficulty of securing credit, labor, and materials. A shortage of dwellings is, therefore, practically universal throughout the United States. New building to meet this shortage should be guided by high standards of planning, construction, sanitation, and equipment so that we will not repeat the mistakes which have been made in the older buildings erected for the use of the industrial classes prior to the war.

Not only is the quantity of houses important but quality also matters. Not only must we have houses, but we must have good houses. There is increasing recognition on the part of employers of labor that poor housing leads either to a heavy labor turnover (for labor will not come to a plant, or at least will not stay, unless decent living conditions can be provided) or to poor health, and thereby to inefficiency. The public at large is also beginning to recognize the close association of bad housing and the growing discontent. Prohibition of the liquor traffic, by removing the poor man's only means of forgetting his misery, is going to increase the volume of such discontent. It is, therefore, urgent that we recognize the correlation of bad housing and ill health and adopt policies which will remove the sources of ill health and of injustice—or to put it positively, adopt policies which will provide wholesome houses for all.

Any ill, to be fought effectively, must be understood. When, for example, malaria was believed to be produced by night air and windows of sleeping rooms were kept tightly closed, not only was malaria not stopped, but other ills were induced. When, however, it was discovered that malaria was borne to its victims by the mosquito, which bred in stagnant pools, windows could be kept open, if properly

[1] Address delivered before the National Conference of Social Work, Atlantic City, N. J., Saturday, June 7, 1919.

screened, and malaria could be fought at its source by draining stagnant water or pouring oil on the surface. To remove the forms of ill health which are produced by housing conditions we must, therefore, discover the specific cause of each house disease and remove that cause. This is not easy because many of the suggested correlations are still under dispute. But pending final agreement on the part of specialists we must act, as in all other matters of human policy, upon tentative conclusions which may be accepted as reasonable.

Our problem may first be considered with reference to the type of houses which have been or may be constructed. Men may live in detached, semidetached, or row houses, or they may live in flats—detached, semidetached, or in rows—or in block dwellings, tenements, apartments, hotels, or lodging houses. Of these types mentioned unquestionably the worst, under usual conditions, are the multiple dwellings, and although these, if properly planned within, and properly placed on the lot, can be rendered tolerably wholesome, they inevitably contain at best features which render them far from ideal as places of permanent residence.

Let us take, for example, the prevailing type of multiple dwelling as found in our American cities. This is a structure four, five, or six stories high, or perhaps higher, built largely of wood, but with brick exterior, three or four rooms deep, sharing party walls with similar buildings to right and left, sharing with its neighbors a narrow court or shaft at the sides and at the rear an ugly yard (with board fences) filled with clothes lines and drying clothes, outbuildings, and probably ash, garbage, and refuse cans, and in the front sharing with its neighbors an ugly, monotonous, treeless, dusty-paved street. The picture above given, which describes the urban home of the middle classes, does not describe the homes of our wage earners who constitute the major part of our urban population, for to it must be added the inevitable dark hallway, the common toilet, often located in hall, cellar, or yard, the disrepair, and the stench from unclean cellars, halls, and yards, from cooking and washing, from unsanitary plumbing, and from years of careless usage.

Disadvantages of Multiple Dwellings.

Such dwellings as have just been described may contribute to ill health on the part of their occupants (even though these tenements or apartments are newly constructed) in the following way:

1. Through improper location by building on wet and imperfectly drained land; the buildings, especially the lower stories, may be damp and dampness tends to lower resistance to disease. Or by placing the building in a highly exposed position, proper heating in

winter season may be impossible for many rooms and such exposure may reduce resistance.

2. Through the characteristic use of wood for interior if not exterior construction tenants are exposed to a continuous fire risk. Few tenements or apartment houses have more than one fireproof means of egress, if any is provided, so each family is continuously exposed to fire by the carelessness of all the other families in the building. A tenement house fire may mean not only the possibility of death from burning, but also the greater probability of suffocation or accident; but perhaps the form of ill health which is most lasting in its effects is occasioned by fright, which may cause sleeplessness or even permanent nervous impairment.

3. Through defective structure or bad repair there may be continuous danger to life and limb from accident. Winding stairs take their annual toll in broken limbs; rotten flooring, insecure railings of stairs and piazzas, or fire escapes insecurely attached are the cause of many of the diseases technically classified as traumatic.

4. Through defective orientation, with reference both to the points of the compass and to neighboring buildings, tenants may be deprived of sunshine and even of adequate light. Many of our cities have planned, and continue to plan, streets running due east and west. If the apartments are built up to their side lot lines approximately half of their rooms are sunless. The absence of sunshine generally means dampness, cheerlessness, and for those thousands of flats which have no sunlighted room a reduced resistance and an increased exposure to disease, for sunshine is an effective germicide as well as a promoter of improved metabolism. The sunless room or apartment facing the north or facing a narrow court or yard shadowed by neighboring buildings is a favorable medium for the transmission of certain respiratory diseases.

5. Through excessive height, for high buildings may contribute to ill health, not only through increasing the fire risk and shutting out sunshine as above mentioned, but also through stair climbing, which is a hardship to the aged and a limitation to the play activities of the very young, and often a source of pain, if not positive danger, to women who are about to become mothers. Tenement houses have no elevators, and hence those families living above the second floor, to avoid stair climbing, will do without out-of-door exercise, which is essential to their health.

6. Through the crowding of many families in the same building, sharing the same halls and perhaps the same toilets, the chances of exposure to certain infectious and contagious diseases are increased. The common stair railing, touched by all who go in or out, is a fomes by which common colds or other diseases of the respiratory system

may be transmitted via the hands of the infected person to the hands of the new victim. The unwashed hand may soon be carried to the mouth and the infection accomplished. Though this mode of transmission is perhaps less serious than the common hand towel or drinking glass, it is not negligible, especially where halls are dark, for the railing is more used in such halls and sunlight does not exercise its germicidal action.

7. Through crowding of population within the tenement, block, or district, for, whether among rich or poor, density of population further adds to ill health by the nervous wear and tear which it entails. It is difficult to secure relief from the noises made by your neighbor, who insists upon moving around his furniture late at night, or walks the floor with his crying baby, or plays his pianola, Victrola, or cornet during the hours when you wish to concentrate upon your work or to sleep. Moreover, where there is large population there must be considerable traffic of persons returning home or delivering goods or making visits, and such traffic means noise, which in turn means nervous fatigue and sleeplessness. As sleep is essential to the repair of the body after the fatigue and wear and tear of the day's activities, the sleeplessness entailed by crowded living must be considered one of the most serious of the sources of reduced resistance or ill health on the part of the tenement dweller.

8. Through crowding of rooms. Crowding may be caused by shortage of housing, poverty, or ignorant racial habit. It almost inevitably means increased opportunities for communication of disease, either by direct contact, fomites, or droplet infection. Where there is crowding of lodgers in the same apartment with the family there are reduced opportunities for privacy and perhaps for the accepted decencies of life, which may be an occasion in conjunction with other causes for immorality with its train of sexual diseases, or for excessive sexual stimulation, especially on the part of the adolescent, resulting in perversions or neuresthenic tendencies.

9. Through inadequate plumbing or the uses of undesirable or defective fixtures which may mean reduced cleanliness and in various ways increased opportunity for transmission of diseases. Lack of water supply within an apartment makes personal cleanliness and house cleaning difficult. Broken or imperfectly trapped fixtures mean that the occupants must continually breathe sewer gas. Though sewer gas has been determined to be free of bacteria, its presence in an apartment leads to discomfort, reduced appetite, and imperfect nutrition, and in extreme cases to nausea. Where fixtures must be shared by several families there is danger of transmission of venereal diseases and of body parasites.

10. Through poor ventilation. The habitual use of windowless rooms, of rooms on narrow closed courts, or even of rooms having only one window, where for reasons of privacy the door must be kept closed, means at least discomfort from hot, humid, stale air, and probably reduced resistance to disease.

11. Through poor lighting. Dark rooms cause ill health in a variety of ways. In the first place a room which is dark is likely to be dirty, because the dirt can not be seen. Such dirt may contain disease germs, and may contaminate hands or throat and lungs. Families living and working in imperfectly lighted rooms are likely also to suffer from eye strain. When members of the family do housework, sew, or read in such rooms for long periods there may result permanent impairment of the vision, of which chronic headaches are the usual symptom. Careful experiments by the Boston Board of Health have demonstrated that the germs of tuberculosis can retain their virulence in such rooms for a period of more than two months. As one-tenth of the deaths in America are from tuberculosis and as there are at least three living cases in our population for each death, and as also the tenement-house population changes residence frequently the chances of transmission of this disease from one family to another should not be considered negligible, though other methods of transmission of this disease are more common. If, as is frequently the case, all of the rooms of a tenement are gloomy, the resistance of those members of the family who are forced to pass their days in the home is almost certain to be reduced, for human beings, like plants, need sunshine for vigorous growth. Experiments seem to indicate that living in gloomy quarters, especially where accompanied by lack of exercise, results in a reduction of the phagocytic power of the blood, that is, the power to destroy germ organisms, and an anemic condition may also result.

12. Through improper equipment. Defective or imperfect equipment may injure health in a variety of ways. A sink which is set too low means back strain for the housekeeper. A leaky stove may endanger the lives of the tenants from carbon monoxide. Defective gas fixtures may cause poisoning, and defective electric wiring may cause danger to life from fire. Careless insertion of plumbing or heating fixtures may make it possible for vermin and insect pests, which are disease carriers, to pass from the apartments of careless tenants to those of careful housekeepers. Lack of screens or defective screening may expose to mosquitoes, which are bearers of malaria, or to flies, which may be carriers of typhoid fever in cities where modern plumbing is not universal or of the intestinal infections of infants.

13. Finally, the proximity of the tenement to the factory may mean poisoning of the air by chemical gases, mineral dust, or soot, causing throat irritation and reduced resistance to respiratory diseases, as well as increased work for the overburdened housewife in keeping her curtains clean and her home free from dust.

The effects of the discomfort of an uncongenial environment are cumulative and produce irritability, anemia, and lassitude, or what is popularly called "slum disease."

Some of the undesirable features in house construction which have been mentioned are actually reducing resistance or causing disease to the vast majority of the persons now living in multiple dwellings, and are inherent in that type of dwelling. In comparison with the multiple dwelling the detached house is far more conducive to high resistance and good health. With a little attention to planning it can be made structurally safe and every room can be well lighted, well ventilated and equipped for the comfort and convenience of its occupants. For families with children it is the ideal place of residence as it makes possible not only good health, but opportunities for protection from undesirable associates. It also makes possible supervised play activities, and through the household garden offers the children opportunity for familiarity with plants and flowers—an essential part of every child's education.

Housing Development as a Post-War Problem in Canada.[1]

By Thomas Adams, Housing and Town-Planning Adviser to Canadian Government.

IN Canada no attempt was made to carry out any Government housing during the war. That was Canada's misfortune in one respect, since it prevented using the energy and restlessness that comes during the periods of war as a means of creating some bold experiment in model housing.

On the other hand, it is our good fortune that our present position is not prejudiced by the carrying out of any extravagant and hurried scheme during the war, meaning by extravagant, of course, the necessary extravagance created by war conditions.

Since the war ceased Canada has commenced to deal with housing as a national affair and as a problem of reconstruction. In my opinion the Canadian policy in this matter is based on the soundest principles that can be applied under a federal constitution in a

[1] Address delivered before the National Conference of Social Work, Atlantic City, N. J., Saturday, June 7, 1919.

democratic country. Of course, it is not in any sense final. It is a beginning, and I am certain that if proper administration is applied it will be a beginning of very great things.

In the inauguration of an entirely new policy, involving almost revolutionary changes in sentiment and practice, it is better to begin cautiously and with moderate expectations, only making sure that the principles are sound and that whatever is done is a contribution toward the complete administrative whole it is sought to attain. It is desirable also to use public enterprise as a stimulus and aid to good private enterprise and not as an alternative to anything but bad private enterprise.

The Canadian National Housing Project.

The armistice was signed on November 11. Immediately afterward representatives of the Federal and Provincial Governments of Canada met, and, among other subjects, discussed the desirability of creating better housing conditions. It was observed that there had been a practical cessation of building operations during the war and a scarcity of housing accommodations. The Privy Council reported on the matter on December 2, and on the following day, December 3, an order in council was issued granting a loan of $25,000,000. On December 12, a committee of five members of the cabinet was appointed to administer the loan. Prior to the taking of this action by the Dominion Government, the Provincial Government of Ontario had decided to appropriate $2,000,000 for housing in Ontario as an addition to any Federal loan that might be given.

The Federal loan of $25,000,000 will be distributed among the nine Provinces of Canada pro rata to the population. It is hoped that each Province will add a contribution of its own so as to make the available total much larger. The money will be lent to the Provinces at 5 per cent and will be repayable by them, in most cases, in six equal monthly installments of principal and interest.

Administrative Machinery.

The Federal Government, the Provincial Governments and the municipalities, are all involved in the machinery that has to be set up to carry out housing schemes.

Under the constitution of Canada the duty of providing houses and controlling land development is a Provincial and municipal and not a Federal matter. Many have urged that the Federal Government should itself carry out housing schemes, but this would interfere with the autonomy of both the Provinces and the municipalities. For the sake of the future development of Government housing and its successful administration, it is essential to pay full regard to this

tact. In the working out of the administrative machinery great care has been taken to avoid anything that would have the appearance of interfering with the local government. At the same time it is obviously essential that the Federal Government should take some responsibility with regard to the way in which its money is to be used. It certainly should give some leadership and guidance on the subject and afford an opportunity for coordinating the work of the various Provinces.

Before securing the loan, each Province has to submit a general provincial scheme of housing for the approval of the Federal Government. Some kind of Federal organization is necessary to examine these schemes, to report on them, and subsequently to exercise some oversight to see that they are carried out. All this must be done with great care and tact as a means of assisting the Provincial Governments, rather than as a means of criticizing anything they do. Once each provincial scheme is approved by the Federal Government, the jurisdiction in respect of all local schemes will rest with the provincial authorities. In the same way it is expected that as a rule the provincial authorities will show a similar confidence in the municipalities and that once the municipal scheme of housing is settled the municipality will be left comparatively free to administer it and to obtain such loans as it requires to be spent in conformity with the scheme. To put it briefly, the machinery represents complete cooperation between the Federal, Provincial, and municipal governments with the responsibility divided as follows:

Federal.—Responsibility for approval of general schemes of each Province dealing with the standards and conditions to be imposed by the Province in making loans to municipalities; carrying out of advisory work in connection with provincial legislation, forms of scheme, and preparation of plans and specifications, and reporting on questions relating to standardization, comparative data collected from different Provinces and the like.

Provincial.—Responsibility to repay loan of Federal Government and to administer the general scheme it has prepared and to secure from each municipality borrowing money a general municipal scheme for its own area.

Municipal.—Responsibility for repaying loan to the Province and supervising and carrying out all housing schemes in accordance with its principles and standards included in the municipal scheme which is part of, or connected with, the general provincial scheme.

The result of the procedure is that the real work and the real responsibility rests with the municipality, although in many cases commissions appointed in municipalities have to, or in some cases may be, appointed. At any rate the responsibility is local. It is

near to the people. Close observation of the working out of details will be best attained by this means. It is likely that the municipalities will be slow to accept the responsibility. This has proved to be a stumbling block to housing progress in most countries where national housing has been carried out. It is also probable that some people will fear that the municipal administrations are not competent to undertake such additional responsibilities.

Undoubtedly there are defects in the municipal councils and forms of government and good reasons can always be found for withholding the giving of any added duties or powers to municipal administrators, but the statement may be hazarded that the longer we continue to do that the longer we shall have to wait to get local bodies in whom we can have confidence. My own opinion is that we should pile up responsibility on the municipal authority for all matters of local administration; that we should not attempt to supersede them more than is necessary for purposes of coordination and general progress and that even if this does produce mistakes these mistakes will, on the whole, be less than if we attempted to centralize the machinery of the Government too much and to create new forms of bureaucracy.

The actual progress made up to the present is that a Federal office has been opened in which there are town planners, engineers, and architects engaged in collecting data, preparing reports on different aspects of housing and town planning; preparing model plans for distribution to the Provinces and municipalities; acting as a clearing house for information on all phases of the housing question; inquiring into questions of shortage of houses, etc. This office is in direct communication with the administrative departments of each of the Provinces. The order in council setting out the Dominion scheme was not completed and issued until each Province had an opportunity of raising objections, the result being that the Federal scheme was practically agreed to by all the Provinces before it was made public.

Since the Federal scheme was issued, on February 20, the Provinces of Nova Scotia, Prince Edward Island, New Brunswick, Ontario, Quebec, Manitoba, and British Columbia have passed acts of Parliament to take advantage of the loan and to outline the procedure necessary for that purpose, leaving only two Provinces which have so far not joined in the Government scheme for reasons that are local and not because they object to the scheme in any principle.

In four out of these seven Provinces general schemes of housing have been prepared, and in the other three schemes are in course of preparation.

In Quebec and Ontario directors of housing have been appointed, and steps to create special officials are also being taken in the other Provinces.

It is not possible to enter into many details regarding the progress made, but a quotation from the latest report of the director of housing of the Province of Ontario may suffice:

The following 47 municipalities have passed the necessary by-laws bringing them under the provisions of the Ontario Housing Act, 1919.

Cities.—Windsor, Fort William, Galt, St. Catharines, Sault Ste. Marie, Ottawa, Sarnia, Woodstock, London, Guelph, Niagara Falls, Brantford.

Towns.—Sudbury, Sandwick, Hespeler, Intersoll, Oshawa, Ford City, Cochrane, Trenton, Sturgeon Falls, Leamington, Palmerston, Perth, Whitby, Listowel, Bridgeburg, Thorold, Mimico, Walkerville, Midland, Arthur, Port Colborne.

Villages and townships.—Port Dalhousie, Madoc, Port Credit, New Toronto, Nimitra, Point Edward, Richmond Hill, Fergus, Port McNicoll, Milverton, Neebing, Brantford, West Oxford, Gloucester.

About 500 plans have been approved by the director of the Bureau of Municipal Affairs, and in a considerable number of the above-mentioned municipalities houses are under construction.

The director estimates that the loans required by these municipalities will aggregate nearly $10,000,000.

About 20 municipalities are considering plans for acquiring land and erecting houses on a large scale. Some of them have already purchased land.

The largest city in the Province (Toronto) is not included in the above list. It is preparing a scheme of its own under special powers and purposes to carry it out by means of municipal bonds raised for the purpose.[1]

The progress already made within the short period of time from December, 1918, to the present shows that the process of joint cooperation of the three sets of Government has not led to any serious delay in administration.

Standards and General Principles of Schemes.

In the order in council of February 20 the standards and principles of the Federal scheme were set forth. The general objects were stated to be as follows:

To promote the erection of dwelling houses of modern character to relieve congestion of population in cities and towns.

To put within the reach of all workingmen, particularly returned soldiers, the opportunity of acquiring their own homes at actual cost of the building and land acquired at a fair value, thus eliminating the profits of the speculator.

To contribute to the general health and well-being of the community by encouraging suitable town planning and housing schemes.

Four conditions were attached to the proposed loan, namely:

1. The general housing scheme had to be approved as already stated. It was required that the general scheme should include a

[1] For further information concerning Toronto, see Report of the Ontario Housing Committee, Toronto, 1919. 187 pp. A summary of this report appears in the June number of the MONTHLY LABOR REVIEW, pp. 294 to 297.

schedule of minimum standards for purposes of health, comfort, and convenience.

2. Loans were restricted to $3,500 for frame or veneered dwelling and $4,500 for dwellings of more durable construction as specified.

3. Money could be loaned only to the Provinces and municipalities, to housing societies or companies with dividends limited to 6 per cent, and to owners of lots for erecting houses for their own occupancy.

4. The period fixed was 20 years for local improvements, such as pavements and frame or veneered buildings, and 30 years for land and more permanent buildings. Due regard is paid to the life of improvements with a view to encouraging more permanent construction. Thus, a loan of $3,000 for a frame dwelling for 20 years would cost about the same per month as a loan for a better house costing $4,000 for 30 years.

Aside from the above four conditions a number of recommendations with regard to standards are attached to the Government project. Some of the Provinces are adopting these recommendations merely as suggestions to be made by them to the municipalities. Others are adopting them and making them compulsory, and others are going further in some respects and not so far in others.

Recommendations of Federal Government as to Standards.

The standards set forth are very general and do not enter into much detail. The object was to secure the things which are essential and which are usually overlooked in municipal by-laws. The Government recommends that land be acquired by a speedy method at the lowest cost; that sites be properly planned and that local improvements, sewers, and water supply be provided in advance of the building of houses; that one-tenth of all areas for housing schemes be reserved for open spaces; that not more than one-tenth and in no case more than one-eighth of the gross cost per dwelling be spent on land; that certain standards be applied to the sizes of rooms, distances between buildings, and sanitary conditions. For instance, every house should have a bathroom.

Proportion of Cost of Land to Cost of House.

With regard to the suggestion that the cost of land should be fixed in proportion to the cost of the dwelling, the reference is to the land in an unimproved condition, and if pavements, sewers, and water mains are constructed, it would mean that the proportion of the site of the dwelling might be a fourth or a fifth instead of an eighth or a tenth.

So far as the bare land is concerned, as already noted, no workman's house should be erected on land which, in an unimproved con-

dition, costs more than one-eighth or a tenth of the complete dwelling. One of the curious facts is that the Provinces where land is most plentiful, in relation to population, are finding it most difficult to comply with this suggestion. In one of the old towns of Ontario land is being obtained for building houses at $20 a lot, which will represent about one one-hundred-and-fiftieth of the completed building. The effect of this will be that the purchaser will be able to spend an extra $200 on his house above what he could have done on land costing the ordinary price in a small town. This $200 will go to supply those improved sanitary facilities which are usually left out through lack of means caused by too much money having been spent on the site.

Canadian Scheme Suitable for United States Conditions.

The Canadian scheme is one that may well be followed in the United States. There should be in the United States Government an office of housing and town planning, a coordinating and advisory bureau. The war has been won by organization, as well as by the valor of our men. If it had gone on a few months longer, you would have wasted more than you now need to spend in solving your housing problem. The Federal Government should offer a sum of money which will be equivalent to the Canadian appropriation—that is, about $300,000,000—to assist the States to carry out housing and town planning schemes. This money should be lent at 4 per cent, to be equivalent to our 5 per cent. It should be lent to the State Governments, after consulting with them, and after settlement with them of the principles that would govern the spending of the money on housing schemes. Each State would prepare its own housing scheme, and one main condition of any Federal scheme should be that such a State scheme be prepared and approved before any loan is granted. Under State control, the municipalities or housing commissions would work out the problem locally and would build houses where needed.

To make housing improvement more effective, however, it will be necessary to have better and more general town planning legislation in the States and to unite the administration of housing and town planning together in a State department.

It seems difficult to believe that the American people, with all their resourcefulness, their love of freedom and humanity, and their unequaled opportunities will let their program of reconstruction continue to have the defect that it does not deal adequately with the most pressing social problem of our time. Everyone realizes what the housing problem is to-day in the big cities. In New York and Montreal it is getting beyond control—by any means within our

power. Let us ask ourselves what the problem will be 20 years hence, when the slum population has multiplied more rapidly than other classes of population, when the slum areas have grown proportionately greater than the healthful areas, and when the great cities are spread over double their present territory. There is hardly another social question to which it is more important that we should apply our energies, and there are few other social problems that can be effectively dealt with, without at the same time dealing with the problem of improving housing conditions.

Pennsylvania Housing and Town Planning Association Conference.

THREE points of interest in housing in Pennsylvania formed the themes of discussion before the annual conference of the Pennsylvania Housing and Town Planning Association which convened at Philadelphia on June 9 and 10. The matters under discussion were: (1) The Government villages and housing developments in and surrounding Philadelphia and the disposition of such Government projects; (2) questions affecting the financing of the wage earners' houses; and (3) aspects of the housing situation in the State of Pennsylvania.

The descriptions of the Government villages and developments surrounding Philadelphia were supplemented by visits of the delegates to Yorkship Village near Camden, the Oregon Avenue project in South Philadelphia, and to Sun Ship Village and Buckman Village near Chester.

The Government housing projects were looked upon as the beginning of a new régime in the relation of capital and the worker, as the beginning of higher ideals in the provision of houses and in community development, and as forecasting the importance of the architect and town planner in the progress of industrial housing. In spite of the fact that abnormal war-time prices exaggerated the cost of producing workmens' homes, it was felt that in ordinary times it would cost no more to make beautiful houses than ugly ones. As yet the war-time housing projects have not demonstrated their success from the point of view of maintenance. While models from an architectural and town-planning point of view, it was generally agreed that those questions relating to community development, to house management, to rental and the like were still matters on which no light was thrown by Government experience. Yorkship Village, for instance, is still very incomplete, there

being few or no streets paved, few sidewalks, and yards and open spaces unfinished. Very few tenants are as yet in the houses.

Yorkship Village is operated by the Fairview Realty Co., the small capital stock of which is furnished by the New York Shipbuilding Co., whose employees will be the principal beneficiaries of the village. The capital and cost of the village have been furnished almost wholly by the Emergency Fleet Corporation, which by the rigorous terms of its loan practically controls the operations of the realty company. The realty company must limit its dividends to 6 per cent.

The public improvements of Yorkship Village, its utilities, its schools, and its police are part of the municipal administration of the city of Camden, N. J. While this is true, the city as laid out is essentially a unit by itself and approaches very closely to the ideals and principles of the garden suburb of England. It is not a garden city, that is, an independent municipal unit with its own distinct industries and social and economic life.

The Oregon Avenue development in South Philadelphia, described by the engineer of the Emergency Fleet Corporation, meets the needs of the navy yard employees in that district. This was built on filled-in land within the city of Philadelphia where there were no modern improvements of any kind whatever. For the site the Government paid nearly $13,000 per acre or about 29 cents per square foot. In laying out the site, provision was made for four parks, one of which is now set aside for the school area.

Some 656 dwellings and 14 stores are provided. The houses are built in rows, 6 to 12 dwellings in a row. Each has a cellar with hot-air furnace and all modern and sanitary improvements in kitchen and bathroom. One speaker pointed out that these houses were more attractive than those of most wage earners and that the development as a whole provided practically the amenities of a garden city. At the same time it was felt that the bedroom provided in each house was of the minimum size and it was noted that only one bedroom was provided in each dwelling. Also the storeroom in the roof of the house, large enough to be a separate room, but without a window, may in time, it is feared, be used as a bedroom.

While Yorkship Village was distinctly along the lines of the English garden city, the village of Buckman, built by the Chester Emergency Housing Corporation, the capital of which is supplied by the Chester Shipbuilding Co., and the money for the building of which was almost wholly furnished by the Emergency Fleet Corporation, is more in the nature of an American-planned village.

Buckman Village is now 80 per cent occupied, provision being made for about 500 families. Dwellings range from 4 to 6 rooms with a

bath and with furnace heat. The rent ranges from $6.75 per week for four-room to $9 per week for six-room houses.

The men who occupy these houses are skilled shipyard and other workers. Of 5,000 skilled shipyard employees, 2,400 average $35 a week in their earnings. The remaining 2,600 earn over $35 a week. Unskilled workers, who are not housed in the community, earn 40 to 58 cents an hour.

The gross number of families per acre, i. e., including area built upon and open spaces, is 12, and the net number, i. e., per built-up block, is 20 families. The cost of the village will be approximately $3,107,000.

While the village is built primarily for the shipyard workers of the Chester Shipbuilding Corporation, it is occupied by workers of neighboring industries, the population of the two groups being about equal. This fact of occupancy by employees other than those of the company controlling the village will, it was observed, prevent the community from becoming a distinctively company town.

There have been protests against the rents, tenants' meetings having been held. In spite of such protests, however, it has been decided not to reduce rents for the present. It is not clear as yet what will be the future policy of the controlling company in the management of the village.

Disposition of Government Housing Projects.

Mr. Joseph D. Leland, 3d, former vice president of the United States Housing Corporation (Department of Labor), who discussed the matter of the disposition of the Government war housing developments, pointed out the lack of unity which had characterized the Federal housing policy during the war and suggested as a preliminary step the bringing together, under one administration, of the projects of the Department of Labor and the Emergency Fleet Corporation, and then to dispose of these under a single policy through some cabinet officer. He urged that the Government should "get out of the housing business at once." In disposing of the various projects, each locality should be taken by itself and a committee of five persons appointed in the community representing: (1) Local industry; (2) national board of real estate; (3) labor; (4) the community (consisting of two representatives). In some cases it might be well to try the cooperative form of control and management. In other instances it might be well to sell the houses to the individual on easy terms, say, 10 years at 5 per cent interest.

Most of the speakers in discussing the disposition of the Government housing projects assumed that it would be necessary for the

Government to assume a considerable loss on its housing projects and charge it to the legitimate cost of the war. Whether the Government stands to lose on its housing projects depends upon two considerations: (1) Whether the houses in question are temporary or permanent; (2) into whose hands the houses are to go. As regards the first point there is scarcely any question but that the Government must lose practically all the money it has put into temporary housing. In the case of permanent projects, by retaining title and administration and renting the property there is no reason why the Government may not ultimately regain its principal capital investment, and secure current maintenance expenses from rentals charged. If, however, the Government were to dispose of its property to private individuals or companies immediately, it would have to do so at a cost that should enable those companies or individuals to begin immediately to realize a profit on their investment. Those individuals or companies would buy these projects with a view to the possibility of profit contained in them, whereas the Government would retain them merely with a view to securing maintenance charges and sufficient to regain its principal and perhaps an additional sum for a certain amount of interest. The private dealer or company has in mind the taking of as many future profits as possible out of his investment, while the Government as a continuing holder would have no such point of view. It could take only one return and secure that gradually over a long term of years. To recapitulate: That present rents will not pay interest and maintenance charges is admitted. Future returns will, however, tend to make up the present deficiency. Thus the immediate losses will be prorated over a long period of years—the life of permanently built and well maintained houses—and greater opportunity will be given to make up present deficiencies.

Financing the Wage Earners' Houses.

The question of how to finance the wage earners' houses was discussed by various speakers. Mr. K. V. Haymaker, of the Information and Education Service of the Department of Labor, discussed the methods and possibilities of the building and loan association and the proposal for a Federal home loan bank. Mr. H. F. Blunt, real estate manager for the company housing scheme of the New Jersey Zinc Co., Palmerton, Pa., described the plan of selling in practice by that company. Representatives of the operative builders, also, as well as a proponent of copartnership housing, were heard. While the methods of operative builders and of the building and loan associations had their place, thus far very few of them were reaching the

low-paid wage earner or helping him in owning a home. It was generally agreed that the laborer was more and more becoming a renter of houses put up by speculative builders. The building and loan associations reach the middle class and higher-paid employees, as do also the operative builders. Company housing likewise reaches mainly the skilled and better-paid workers. Copartnership housing or cooperative methods have not yet been practiced in this country, but at the same time they offer to the wage earner the advantages of home ownership coupled with the freedom of movement of the renter. Under the cooperative plan the wage earner who desires a home becomes a stockholder in a limited dividend corporation and a tenant of the houses which this corporation builds.

Housing Problems in Pennsylvania.

The principal housing problem now affecting Pennsylvania consists in the securing of minimum standards in housing construction in cities below the first and second class in the State. Philadelphia and Pittsburg, as independent municipalities of the first and second class, have authority to formulate their own housing codes. A zoning commission, whose secretary, Mr. William C. Stanton, spoke, is at work in Philadelphia and will present an ordinance to the council providing for the division of the city into sections governed by rigid building restrictions. The height of buildings will be governed by rules applicable to each zone, of which there will be five. Buildings within the various zones will range from a maximum of 40 feet in the first zone to 150 feet in the fifth zone. From the point of view of use four zones will be established: (1) Residential; (2) commercial; (3) industrial; (4) unrestricted. All public garages will be excluded from residential districts.

New York's experience in zoning was discussed by Mr. Lawson Purdy, a member of the New York districting commission, and Pittsburg's graded tax law was outlined by Mr. Wm. N. McNair. This law provides for the reduction of taxes on improvements equal to 10 per cent every third year, until they reach a maximum of 50 per cent of the present assessment, and for the gradual increase of the taxes on land. While one speaker insisted that in Philadelphia such a tax would bring into use various estates held by parties who, having other sources of income, did not find it necessary to dispose of them, still another speaker was of the opinion that such a system of taxation was undesirable because it would bring into use pieces of ground within the crowded centers of the city held unused and therefore tend to fill up with buildings areas in the city which now furnish open breathing spaces.

The need of a State housing law was set forth by John Molitor, chief of the Pennsylvania bureau of health and housing. The speaker emphasized the fact that in order to hold labor in the period of reconstruction it would be necessary to improve housing standards. He pointed out how employers who had safe and sanitary houses for their workmen were able to retain these employees during the period of the war when the great shifting to and fro of labor began under the pressure of mounting wages. It will be necessary for the State of Pennsylvania to assist in this work of improved housing, to establish a central bureau and a State model housing law which will serve to create and maintain housing standards and to unify all efforts in that direction.

Mr. John Ihlder, secretary of the Housing and Town Planning Association of the State, briefly reviewed the efforts of the association in trying to secure a State-wide housing law from the legislature. Apparently the association, in acting upon the republican theory of government and approaching the duly authorized representatives of the people for securing a housing law, had made a mistake, in that its effort had proved a complete failure. He suggested that it was time to apply the democratic theory of government and organization by beginning at the bottom among the people and securing an understanding of the needs of housing and thus bringing ultimate pressure to bear upon the people's representatives. He also pointed out the seriousness of the defeat for a model housing law in Pennsylvania at this time because of the prospect of a building boom which may give rise to low standard housing and insanitary building. The democratic method of education and pressure from below must now be pressed with particular vigor if quality in housing is to be retained.

Housing Conditions of Workers in War Industries in Cleveland, Ohio.

ACTING in cooperation with the Homes Registration Service of the United States Housing Corporation, the Cleveland Chamber of Commerce, through a committee on housing and sanitation, made a first-hand field survey of housing conditions in Cleveland, particularly as respects workers in the war industries. The investigation was begun in June, 1918, and the report issued in October, 1918.[1] The report is based upon schedules representing

[1] An investigation of housing conditions of war workers in Cleveland, made by the committee on housing and sanitation of the Cleveland Chamber of Commerce and by the United States Homes Registration Service. Financed by the mayor's advisory war committee. 46 pp.

80,000 persons, or approximately 10 per cent of the population. These schedules were procured from three sources—a house-to-house investigation, a lodging-house investigation, and from schedules distributed to employers and employees in factories.

The summary and conclusions of the committee are brief and are reproduced below:

We believe that this investigation has established the following outstanding facts:

First. The type of industrial housing in Cleveland is not as high as the standard set by the Government for industrial war workers and not as high as we had heretofore believed the Cleveland standard to be. The standard of property maintenance, both as to repair and cleanliness, is not good, and sanitary equipment is inadequate and much of it is of antiquated type. There is unnecessary lot overcrowding, the medium percentage of lot occupied being 77 per cent, and the result is high fire hazard.

Second. There is a rapidly increasing tendency on the part of our industrial workers to live in tenements, 27.1 per cent, or more than one-fourth of them, living in tenements or under tenement conditions. There is also distinct room overcrowding, 50 per cent of the families having less than one room per person. Tenement conditions and overcrowding are two housing evils that a city which has every possibility of expansion both in territory and transportation facilities might and should avoid.

Third. Rents are not high in terms of percentage of earnings spent in rent, but high in terms of value received as so many of the houses and suites within the range of price that workmen can afford are old and in a poor state of repair and sanitation.

Fourth. Home owning among industrial workers is on the decrease, 35 per cent of the families in Cleveland owning their homes in 1910 and 13.8 per cent of the wage earners owning their homes in 1918.

Fifth. The Negro industrial worker is not overcrowding more than the whites. He is, however, paying a much higher rent and is getting in return much poorer accommodations.

Sixth. Thirty-four and one-tenth per cent of the wage earners are lodgers. Thirty-five and three-tenths per cent of the lodgers are married. The number of workers who are lodgers is increasing much more rapidly than the number of workers who are members of families. The lodgers have been at present places of employment a much less time than have the members of families, showing that labor turnover is greater among the lodgers. Wage rates are the same for members of families and lodgers, but weekly earnings for members of families show that they work about one-half day per week more and about two days a month more than do lodgers, thus showing that there is more absenteeism among lodgers. An alarming lodger problem, a problem that affects the family by destroying the family unit, that complicates the social order by failure to establish homes, that lowers sanitary standards by overcrowding, and that decreases industrial production by contributing to absenteeism and turnover, is developing.

Seventh. There is an acute housing shortage, both in houses that the worker can afford to rent or purchase, and in rooms and suites that are available to provide even temporary quarters for the ever-increasing industrial army that is pouring into our city. We need houses for at least 12,000 families, and we need improved, modern lodging houses to take the place of the 14 miserable, insanitary, overcrowded lodging houses that now house about 2,000 casual workers and transients in the downtown districts and for the many more of the foreign-speaking workers in the so-called foreign lodging houses and bunk houses.

We are forced to the conclusion that the housing problem can not be solved by private building enterprises under existing financial conditions, that the securing

of adequate housing for workmen is one of the fundamental problems upon which should be exerted all the social and economic forces of the community. If workmen are to come to our city to man our industries, it is apparent that they must be housed by other means than those to which we have hitherto resorted. Either the community or the Government must come to the rescue and provide houses that are within the range of price that the worker can rent or purchase, or through some control of resources make it possible to provide comfortable living accommodations for himself and family.

Garden Cities for the Suburbs of Paris.

THE problem of garden cities—which is still a new one for France—is discussed in detail in a recent publication [1] by the Public Office of Low-cost Dwellings of the Department of the Seine. The first part of this volume is devoted to a report by Henri Sellier on plans for the construction of garden cities under the regulations of the law of 1912 creating the Public Office of Low-cost Dwellings and appropriating 10,000,000 francs ($1,930,000) for the purpose of acquiring land to serve as sites for such villages in the suburbs of Paris. The report is based largely upon the preliminary views of a number of architects who have been appointed by the office to examine and report upon the problem of garden cities for the Department of the Seine.

While it is expected that the work of these architects will carry the impress of their own personalities, it is recognized as a fundamental necessity that certain general principles will have to be adopted at the outset to which all specific plans must conform in order to give consistency to the whole.

The general principles to which the office is committed are summed up under the following three statements of purpose and method: (1) To build on land acquired in the suburbs, villages which will be unquestionably esthetic and hygienic, and which will afford the maximum of comfort for their inhabitants with a minimum investment; (2) to apply rules which will guarantee to the community all unearned increment, eliminate all kinds of individual speculation, and safeguard the esthetic and hygienic principles which are the basis of these plans; (3) to limit, as far as consistent with economic necessities and social needs, the erection of multiple dwellings of small capacity, building by preference one-family houses, detached or grouped, according to the different types of local architecture.

The preliminary plans submitted by the architects have taken into consideration topography, the normal direction of traffic, and district-

[1] L'Office des habitations à bon marché du Département de la Seine. La constitution de l'Office des habitations à bon marché du Département de la Seine; son action et ses travaux du 10 juillet 1916 au 31 décembre 1918. Paris, 1919. 195 pp.

ing, as well as the different classes of people who will constitute the inhabitants of these future suburbs.

The report reviews various methods under consideration for regulating the ownership of property in these garden cities, but does not commit itself to definite decision in favor of any of them, stating that choice will be made from these various plans at a later time. It says, however, that "a matter of prime necessity in planning the garden cities is that of securing them from all possible speculation, and one of the first problems which the office will have to determine is how it will be possible to do this. Whether the houses will ultimately be constructed by the office itself, by cooperative building societies, or by the individual owners, the building will have to be strictly according to rules, and the architects charged with the making of the plans should most rigorously control construction and supervise the application of the rules imposed by the office."

Preference is expressed in general for one-family houses arranged in groups (terrace or row houses), rather than for detached houses or apartment houses. It is, however, foreseen that a limited number of detached houses will probably be built for the more prosperous class of inhabitants. In the matter of the grouping of houses, the convenience of various types of inhabitants, such as clerical and manual workers, families with and without children, is given prime consideration. Provision is made for playgrounds, access to schools, and general recreation.

Housing Conditions in the Cities of Norway.

A QUITE definite picture of present housing conditions in the principal cities of Norway may be visualized from a recent report of the Statistical Office of the Kingdom.[1] The material was collected in January, 1917, except for Christiania and Bergen, where the data apply as of February, 1916. The number of dwellings canvassed in Christiania—a dwelling meaning a unit occupied by a family—was 54,702; in Bergen, 20,530; Stavanger, 10,125; Skien, 3,546; Porsgrund, 1,179; Risør, 796; Gjøvik, 833; Fredriksstad, 3,480; Aalesund, 3,233; Notodden, 1,167.

One and two family houses predominate in the smaller cities. Christiania, the capital, on the other hand, is a city of multiple dwellings, where 62 per cent of the houses contain 4 or more dwellings or apartments to the house, and where over three-fifths of the houses are three or more stories high. Very few houses in the other princi-

[1] Statistiske Centralbyraa. Beboelses-statistik for enkelte norske byer for 1917 (1916). (Statistique d'habitation pour quelques villes norvégiennes en 1917 (1916). Christiania, 1918. 3 p. l. 65 pp. (Norges officielle statistik, VI: 131.)

pal cities contain over six dwellings to the building. The largest percentage of single-family houses in any city is 66 per cent. The seaports of Bergen and Stavanger contain, respectively, 19 and 28 per cent of single dwellings.

The average number of persons per dwelling in Christiania is 4.49; in Bergen, 4.31; in Stavanger, 4.29; in Skien, 4.49; in Porsgrund, 4.11; in Risor, 3.72; Gjøvik, 4.58; Fredriksstad, 4.16. The average number of persons per dwelling appears to range, therefore, from 4.1 to 4.5. The average number of persons per room was as follows: Gjøvik, 1.30; Bergen, 1.29; Christiania, 1.27; Stavanger, 1.27; Skien, 1.19; Porsgrund, 1.01; Risør, 0.91.

On the assumption that two or more dwellers per room constitute overcrowding, it appears that over one-fifth of the dwellings in Christiania were overcrowded, and that considerably over one-third of the persons in the dwellings in that city were living under conditions of overcrowding. The details for Christiania and other cities are contained in the table following, which applies only to dwellings of one to three rooms, including kitchen.

NUMBER AND PER CENT OF DWELLINGS AND PERSONS OCCUPYING DWELLINGS HAVING AN AVERAGE OF TWO OR MORE PERSONS PER ROOM.

Cities.	Dwellings.		Occupants.	
	Number.	Per cent.	Number.	Per cent.
Christiania	8,743	21.14	61,958	35.70
Bergen	3,411	20.37	23,498	35.27
Stavanger	1,620	20.53	10,167	33.48
Skien	383	13.81	2,895	24.79
Porsgrund	64	7.87	460	15.83
Risør	34	6.44	221	13.25
Gjøvik	148	23.02	1,020	37.71
Notodden	303	26.00	2,100	40.60

Instances of excessive crowding are noticed, in that 5.82 per cent of the dwellings in Christiania contain over three persons per room; 6.13 per cent in Bergen, and 6.88 per cent in Stavanger. The corresponding percentages for those cities as respects the number of persons affected—that is, those living in rooms where the number per room is over three persons—are 11.47, 11.47, and 11.88.

As to ownership of dwellings, no information is available for Christiania and Bergen, the two largest cities. For the smaller cities it appears that the highest percentage of ownership is 56 per cent, namely, in Risør. In other cities the percentage of owned houses is as follows: Stavanger, 36 per cent; Skien, 44 per cent; Porsgrund, 53 per cent; Gjøvik, 20 per cent.

The investigation disclosed 285 cellar and attic dwellings in Christiania occupied by 975 persons; 621 in Bergen, occupied by 2,074

dwellers; and 375 in Stavanger with 1,351 occupants. These do not form a large percentage of the total number of dwellings covered except in Bergen, where the percentage of such dwellings was 3 per cent, and in Stavanger, where it was almost 4 per cent. Cellar and attic dwellings were rarely encountered in other cities.

There were practically no dwellings vacant in the three largest cities, Christiania, Bergen, and Stavanger. Those that were reported as unoccupied at the time of the census were so by reason of undergoing repairs and were merely temporarily awaiting occupancy. The largest percentage (6.57) of unoccupied dwellings was in the small town of Risør.

The rents are the highest in Christiania, Bergen, and Stavanger. The yearly rentals in some of the cities for indicated accommodations are as follows:

ACCOMMODATIONS AND RENTAL CHARGES PER ANNUM IN CERTAIN CITIES IN SWEDEN.

Accommodations.	Christiania.	Bergen.	Stavanger.	Skien.	Porsgrund.	Gjøvik.
1 room without kitchen	$35.11	$29.48	$26.80	$28.14	$38.86	$18.76
1 room with kitchen shared	39.40	36.45	32.16	29.75	28.94	.....
1 room with kitchen	57.35	46.36	34.57	38.32	33.50	33.23
2 rooms with kitchen shared	67.00	62.71	53.87	45.56	47.97	48.24
2 rooms and kitchen	91.92	74.77	59.50	58.96	53.60	51.99
3 rooms and kitchen	134.80	114.17	92.19	88.17	78.26	77.72
4 rooms and kitchen	201.27	161.34	119.53	117.92	110.42	103.45
5 rooms and kitchen	283.01	227.00	157.58	152.76	150.35	144.18
6 rooms and kitchen	369.04	319.72	175.81	196.18	212.79	164.02
7 rooms and kitchen	457.74	376.27	205.29	233.70	172.86	225.12

Between the years 1910 and 1917 rents of small dwellings in Christiania increased 40 per cent. Increases have been less in the other cities. Rent increases on the whole have been relatively greater in the case of larger dwellings.

For the various cities the percentage increases between 1907 and 1917 have been as follows:

PER CENT OF INCREASE IN RENTS OF DWELLINGS, 1917 OVER 1907, IN CERTAIN CITIES IN SWEDEN.

City.	Per cent of increase.	
	Small dwellings.	Large dwellings.
Christiania	40	45
Bergen	30	40 to 50
Stavanger	30 to 35	45 to 50
Skien	30	25 to 30
Porsgrund	40 to 45	50 to 60
Gjøvik	20 to 30	30 to 50

With the exception of a single community there is a general shortage of housing in the cities of Norway, a shortage which is very acute in the cities of Christiania, Bergen, and Stavanger. In several of the towns not included in the survey in question there is reported a considerable dearth of housing. This lack of housing accommodation, the investigators report, reveals its effects principally in overcrowding, although overcrowding is undoubtedly the result of other economic forces. For overcrowding exists in normal times, a factor to be considered in all efforts to improve housing conditions.

LABOR ORGANIZATIONS.

Seventh Biennial Convention of National Women's Trade-Union League of America.

THE Seventh Biennial Convention of the National Women's Trade-Union League of America was held in Philadelphia, Pa., June 2–7, 1919. About 125 delegates were in attendance, representing commercial telegraphers, boot and shoe workers, garment workers, culinary workers, Federal employees, telephone operators, waitresses, postal employees, grocery and provision clerks, typographical unions, bindery women, cloak and skirt finishers, waist and dress makers, car workers, coach cleaners, woolen and carpet yarn weavers, office employees, librarians, white goods workers, glove workers, ladies' auxiliary of the switchmen's union, high-school teachers, railroad telegraphers, meat cutters and butchers, neckwear workers, textile workers, American Federation of Teachers, elevator constructors, lace operators, waist makers, and street railway employees.

Representatives from the various local leagues were present, as well as fraternal delegates from the Cooperative League of America, the National Consumers' League, the Commission on Church and Social Service, the Women's Union, the American Association for Labor Legislation, and other organizations.

Mrs. Raymond Robins, the president of the league, stated the purposes of the convention to be as follows:

1. To organize all working women into trade unions.
2. To make possible for women an equality with men in industrial and professional opportunity.
3. To make equal pay for equal work a fact, and not simply a theory.
4. To translate the Nation's war-work standards for women into legislative action, so as to assure for women in peace times the same protection industrially that was given them during the war.

The following recommendations were made by President Robins:

The appointment of a committee on international relations.

The calling of an international conference of working women by the National Women's Trade-Union League of America, the British Women's Trade-Union League, the National Federation of Women Workers of Great Britain, and the women trade-unionists of France, to be held in Washington, D. C., in October, 1919.

The continuance, on a permanent basis, of the Woman in Industry Service of the United States Department of Labor.

The appointment of a permanent committee to devise methods for a closer cooperation between the National Women's Trade Union League and the cooperative movement in America and to help in formulating plans for the furtherance of that movement.

The appointment of a Federal commission to study seasonal occupations.

The continuance of the Federal Employment Service of the Department of Labor.

The appointment of a committee by the National Women's Trade-Union League to study and work out plans to meet the needs of the colored working woman.

The establishment of an educational department for the purpose of further developing the School for Active Workers in the Labor Movement; the promotion of educational councils consisting of delegates from central labor bodies and local women's trade-union leagues and committees; the provision, for women, of equal opportunity with men in trade and technical training in schools and colleges.

The appointment of a secretary for the development of interstate conferences of woman trade-unionists.

The provision for the appointment of special field representatives of the National Women's Trade-Union League.

Mrs. William Hubert, representing the Women's Land Army, gave a brief talk on the work of that organization during and since the war. She said that during the war 15,000 women joined this army in order to fill the places of farm workers who had left to go into the service or into industries. Many of the women enjoyed the outdoor work and will continue in it, and many others will forsake the shops and factories to go on the land. Agricultural work was regarded by her as particularly suitable for women employed in the seasonal trades, as it adds to their income and also improves their health. She stated that 273,000 women own farms in the United States, and that many of the Land Army hope to become farm owners.

A mass meeting was held on the evening of June 2 at which Mr. James H. Maurer, president of the Pennsylvania Federation of Labor, was one of the principal speakers. He spoke of the fight for labor legislation in Pennsylvania, stating that it takes years and years of struggle to get labor laws, and that after they are obtained it is difficult to keep such legislation from "becoming mutilated by amendments." The speaker considered it imperative that labor should "psychologize the people," and advocated a daily labor paper with an open forum.

Miss Mary MacArthur, the English labor leader, secretary of the British Women's Trade-Union League, told of the labor unrest that is sweeping her country from one end to the other. The employing classes, she said, are ready to go a very long way to get the cooperation of labor. Some think that such cooperation might be obtained through welfare methods. She said that in England, however, there is no more unpopular word than "welfare." "Reconstruction is too mild a word for us. We are talking of rebuilding from the very foundations of society." In discussing the aspiration for industrial democracy, Miss MacArthur said that "the worker desires self-

control of the interest in the industry of which he is a part. He wants to be a man with a man's interest." She added that "the women are standing side by side with the men." The conditions under which woman munition workers were first employed in England she characterized as "infamous," and described how some employers of munition workers had deducted wages for the time lost during an airplane raid.

We can have a tremendous revolution in England without the shedding of a single drop of blood. I think it is possible to bring about these changes in a constitutional way. I believe our Labor Party and the ideals behind it are bound to succeed.

Miss Rose Schneiderman, president of the New York Women's Trade-Union League and a member of the commission sent to the Paris Peace Conference by the National Women's Trade-Union League, told of the growth of the women's trade-union movement in France. There are 20,000 organized women in the metal trades alone. Of 140,000 teachers 120,000 are organized. She also spoke of the stimulating effect the league's commission had had upon the French working women and of their desire to get together. She declared that it was "up to the workers to stop begging and organize politically," and emphasized the need of the educational movement among them.

Miss Mary McDowell, of the Chicago Women's Trade-Union League, spoke of the munition plants in Bourges, France, and said she had been struck by the new values women were setting on themselves and on their work.

A brief statement was made by Miss Mildred Rankin in regard to southern women's attitude toward unionism. According to her, there are in Norfolk, Va., a very few groups of trade-union men who appreciate the necessity of organizing woman workers. The woman workers have just begun to go into unions. These unionists are chiefly railway clerks, teachers, and telephone operators. Few of these women take an active part in the union. They do not care to go out at night and their parents object to it; Sunday meetings are next to impossible. The organization of colored women is another problem. She stated that to the best of her knowledge there are no organized colored factory workers, but in Norfolk and Portsmouth there are colored day workers organized by localities and not by trades.

Report of Special Commission to Peace Conference.

The report of the National Women's Trade-Union League's special commission to the Peace Conference in Paris was read at the afternoon session, June 3. The members of this commission were Miss

Mary Anderson, assistant director of the Woman in Industry Service, and Miss Rose Schneiderman, president of the New York Women's Trade-Union League.

A part of the report of this commission is given below:

The report of the [International] labor commission provides for only one representative of labor as a delegate to the Washington conference from each of the countries to be represented, and it can not be hoped that such a representative from the United States could be a woman, but, as the Government of each country participating has the right to two representatives of the four delegates, it is quite reasonable to expect that one of such two representatives should be a woman. * * * We have the President's word that when the time comes for making the appointments in question he will give earnest and thoughtful consideration to our request.

We are glad to be able to add that similar action has been taken by the French working women and the working women of the United Kingdom.

We recommend that the National Women's Trade-Union League urge the creation of a women's department in the permanent labor office to be established at the seat of the League of Nations, and that such women's department have a woman chief.

We recommend that the National Women's Trade-Union League appoint women experts to prepare practical and detailed information concerning those questions on the Washington Conference agenda which directly affect the well-being of women industrially, such as maternity benefits, night work for women, child labor, or employment of women in unhealthy industries, such information to be presented to the preliminary international organizing committee of seven.

We further recommend that one of such women experts be commissioned to proceed as soon as practicable to where this committee of seven is to hold its sittings, there to work in cooperation with the women representatives of other nations in safeguarding the interests of women workers in all international laws and regulations which may be proposed.

In view of the importance of this first international labor conference provided for in the report of the labor commission, we feel that a great impetus would be given to the consideration of the questions concerning women by the holding of an international conference of working women in Washington a week or so in advance of the labor conference. We therefore recommend that such a conference be called in cooperation with the working women of France and Great Britain, and can not place too much emphasis on the important and valuable results likely to accrue from the holding of such a conference at the time suggested.

Miss Margaret Bondfield, president of the National Federation of Women Workers of Great Britain, the woman member of the parliamentary committee of the British Trade-Union Congress, and fraternal delegate to represent that Congress in the American Federation of Labor Convention, 1919, talked on English labor conditions. A part of her discussion dealt with domestic workers. She told how these workers were being encouraged to go back into their former occupation with the idea of "turning domestic service upside down," making it a regularized industry, and converting the domestic servant into a self-respecting worker and not a slave. She said they were very hopeful in England of placing this kind of work on a new basis. Effort is being made to secure a regular workday, with proper breaks; Sunday off; time off during the week; and a minimum wage.

Meetings of mistresses who welcome the idea are also being held. Miss Bondfield declared that "unionism is so rampant that even the college bed makers have been organized." She said some of these college bed makers are 60 years old.

In Miss Bondfield's opinion there is a finer and nobler conception of the purpose of trade-unionism at present than there was before the war. More and more matters are being referred to the rank and file instead of to central committees. In this connection Miss Bondfield cited the important part that woman shop stewards are playing in handling grievances, and spoke of the cooperation between men and women in trade-unions.

The opening address of the morning session of June 4 was given by Mr. L. V. Lampson, representing the American Federation of Teachers. Mr. Lampson said, in conclusion, "The union movement among the teachers of the Nation is going to spread to the proportions of a tidal wave. Those proportions have not been reached, but I believe in the next year they will be reached. In 1916 we had 8 locals; at the end of last year we had 34; to-day we have 90; and we are organizing teachers at the rate of nearly one local every other day. The movement is becoming nation wide, and represents a protective and a business and an educational organization of the teachers of the country."

Miss May Matthews, of Boston, told the story of the strike of 4,000 New England telephone operators, 3,700 of whom secured an increase of $3 a week. Back pay from January 1, 1919, was obtained. Seniority rights and the right to bargain collectively were again secured.

At the afternoon session of June 5 Miss Mary MacArthur spoke of the work done during the war by the British Women's Trade-Union League and the National Federation of Women Workers. She said:

> In England we no longer talk about equal pay for equal output or equal pay for equal work. We found that the employers could drive a coach and four through these formulas. It was found that the work was never regarded as equal by the man who was to pay the wages. No longer shall we say "Equal pay for equal work." We say, "The same rate for the same job without regard to sex." * * * The great block of the men were willing to help the women to organize. We owe a debt of gratitude to them. Their objection was to cheap labor, not to women's labor. The existence of a large army of underpaid labor is a constant menace to the general standard of men's wages. * * * Whether or not we can maintain the standard of wages is going to depend upon the maintenance of organization.

At different sessions Mrs. Eleanor Barton, representing the Women's Guild of Sheffield, England, and Mrs. Agnes D. Warbasse, fraternal delegate from the Cooperative League of America, dealt with the cooperative movement in their respective countries. Both speakers regarded trade-unionism and the cooperative movement as the solution of the economic problems of to-day.

Convention resolutions of special interest that were adopted are those favoring a 44-hour week, an international league of workers, State compulsory health insurance, the standardization of domestic work, and the organization of domestic workers.

The recommendation of Mrs. Raymond Robins for the appointment of a Federal commission to study seasonal occupations was amended to read "the appointment by the Department of Labor of a commission, representing both employer and employee, to study seasonal occupations in nation-wide distribution and to make definite recommendations within a given period for the control of seasonal employment."

The later sessions were devoted in part to business matters of the league, including the nomination and election of the national president, vice president, and secretary-treasurer, the members of the executive board, and delegates to the annual meeting of the American Federation of Labor and the Canadian Trades and Labor Congress. Mrs. Raymond Robins, of Chicago, is again to serve as president, and Miss Emma Steghagen, of Chicago, as secretary-treasurer. The new vice president is Miss Rose Schneiderman, of New York.

The next biennial convention will be held in Chicago the first week in June, 1921.

CONCILIATION AND ARBITRATION.

Conciliation Work of the Department of Labor, May 16, 1919, to June 15, 1919.

UNDER the organic act of the department, which gives the Secretary of Labor the authority to mediate in labor disputes through the appointment, in his discretion, of commissioners of conciliation, the Secretary exercised his good offices between May 16, 1919, and June 15, 1919, in 105 labor disputes. The companies involved, the number of employees affected, and the results secured, so far as information is available, were as follows:

STATEMENT SHOWING THE NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR THROUGH ITS COMMISSIONERS OF CONCILIATION, MAY 16 TO JUNE 15, 1919.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Controversy, shoe workers, Bradley-Metcalfe Shoe Co., Milwaukee, Wis.	1	.....	Adjusted.
Lockout, firemen, Central Power Co., Newark, Ohio.	15	50	Attitude of management is antagonistic toward unionism. Company refused to reemploy men discharged on May 12, claiming it has secured other men in their places.
Strike, ore and chemical workers and refinery workers, Mineral Refining & Chemical Corp., St. Louis, Mo.	250	10	Adjusted.
Strike, polishers, electrical workers, and machinists, Hamilton-Beach Manufacturing Co., Racine, Wis.	450	470	Pending.
Strike, building trades employed by contractors, Sharon, Pa.	300	700	Adjusted.
Strike, carpenters employed by individual contractors, New Castle, Pa.	300	.....	Do.
Strike, shoe workers, Salem and vicinity, Mass..	168	5,000	Do.
Lockout, union employees, Dodson Saddlery Co., Dallas, Tex.	8	25	Company has not agreed to meet views of men and it is understood the international union does not approve of the controversy. Some of the men have obtained work elsewhere, and the commissioner will endeavor to get the balance reemployed by the company.
Strike, pulp and paper workers, International Paper Co., Fort Edward, N. Y.	5,000	1,500	Pending.
Strike, pulp and paper workers, Minnesota & Ontario Paper Co., International Falls, Minn., and Fort Francis Pulp & Paper Co., Fort Francis, Canada.	675	1,000	Adjusted.
Strike, inside wire workers, Los Angeles, Calif.: F. E. Newberry Electric Co., San Pedro....	58	100	Do.
Electric Co., Greene Electric Co., Brownell & Gleum, A. B. Smiley.			
Thos. Folkes & Sons, Electric Lighting & Supply Co., Southern California Electric Co., Renard & Starry, Golden State Electric Co.	.....	.....	Unable to adjust.

STATEMENT SHOWING THE NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR THROUGH ITS COMMISSIONERS OF CONCILIATION, MAY 16 TO JUNE 15, 1919—Continued.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Controversy, Retail Shoe Salesmen's Association *v.* Retail Shoe Dealers' Association, Los Angeles, Calif.	300	.....	Pending.
Controversy, waiters, Chinese restaurants, Cleveland, Ohio.	40	.....	Do.
Strike, millmen, Burge Manufacturing Co., Houston, Tex.	27	.....	Adjusted.
Lockout, electricians, Public Utilities Service Corp. of Oklahoma, Tulsa, Okla.	5	120	Do.
Strike, all crafts, Willys-Overland Co., Toledo, Ohio.	12,000	1,500	Pending.
Strike, building trades, Lawrence, Mass.....	600	232	Adjusted.
Strike, molders, T. L. Smith Co., Milwaukee, Wis.	29	200	Men employed elsewhere.
Strike, painters, decorators, and paperhangers, Dayton, Ohio.	350	.....	Adjusted.
Controversy, carpenters, Dayton, Ohio.....	750	.....	Do.
Lockout, all crafts, Carpenter Steel Co., Reading, Pa.	650	.....	Unable to adjust.
Strike, laborers, Edward A. Wehr, Tyrone, Pa..	10	240	Employer willing to pay established wage for similar work in the district. Men would consider nothing less than 40 cents per hour, which did not appear to be justified by a comparison of wages paid at Tyrone.
Controversy, bricklayers, Johnstown, Pa.....	200	.....	Matter had practically settled itself before commissioner's arrival, and the wages asked were generally being paid. No mediation necessary.
Threatened strike, Indiana Coke & Gas Co., Terre Haute, Ind.	14	86	Unable to adjust.
Strike, street car employees, Pittsburgh, Pa....	3,000	.....	Adjusted.
Threatened strike, electrical workers, Cleveland, Ohio.	1,000	.....	Do.
Controversy, carpenters, Cleveland, Ohio.....	7,000	.....	Do.
Strike, boilermakers, McDermott Boiler Works, Allentown, Pa.	5	.....	Unable to adjust.
Strike, boilermakers, Allentown Boiler Works, Allentown, Pa.	2	.....	Do.
Threatened strike, Atlantic refinery, Brunswick, Ga.	1,400	.....	Pending.
Strike, phosphate miners, 14 mines, Mulberry, Fla.	3,000	.....	Do.
Controversy, bakers, Brightstein & Brown, Richmond, Va.	5	3	Adjusted.
Controversy, Northwestern Barbed Wire Co., Sterling, Ill.	240	.....	Do.
Controversy, yardmen, scalemen, and laborers, Cleveland Union Stockyards Co., Cleveland, Ohio.	6	70	Do.
Threatened strike, electrical workers, Municipal Light & Power Plant, Riverside, Calif.	12	20	Pending.
Controversy, boilermakers, Quartermasters' Construction Division, Greenwich Point, Philadelphia, Pa.	9	.....	Adjusted.
Strike, plasterers on construction of Treasury Annex, Washington, D. C.	.....	.....	Pending.
Controversy, Crescent Forge & Shovel Co. and Havana Metal Wheel Co., Havana, Ill.	150	.....	Adjusted.
Lockout, machinists and helpers, rubber garment and rubber tire workers, Gillett Rubber Co., Eau Claire, Wis.	445	.....	Pending.
Strike, building trades, Sioux City, Iowa.....	.....	.....	Adjusted prior to commissioner's arrival.
Lockout, Moline Malleable Iron Works, St. Charles, Ill.	180	30	Pending.
Strike, Century Rubber Works, Chicago, Ill....	145	40	Adjusted.
Strike, machinists, Dundore Machine Co., Reading, Pa.	20	14	Unable to adjust.
Strike, dock laborers, Crosby Transfer Co., Milwaukee, Wis.	35	64	Adjusted.
Controversy, shoe fitters, Nunn, Busch & Weldon Shoe Co., Milwaukee, Wis.	2	90	Do.
Strike, molders, Elizabeth, N. J.....	250	100	Unable to adjust.

STATEMENT SHOWING THE NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR THROUGH ITS COMMISSIONERS OF CONCILIATION, MAY 16 TO JUNE 15, 1919—Continued.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Controversy, Nortac Manufacturing Co., Nortac, Mass.	25	75	Adjusted.
Strike, textile workers, Lawrence, Mass.	15,000	20,000	Do.
Strike, electrical fixture workers, Cleveland, Ohio.	75	.....	Do.
Controversy, carpenters employed by contractors, Reading, Pa.	750	.....	Pending.
Strike, painters and paperhangers, Reading, Pa.	.....	.....	Do.
Strike, electricians, Reading, Pa.	.....	.....	Do.
Strike, Alt Hat Co., Reading, Pa.	.....	.....	Do.
Strike, bricklayers, Reading, Pa.	.....	.....	Do.
Controversy, Choctaw Lumber Co., Broken Bow, Okla.	.....	.....	Do.
Strike, metal polishers and buffers, Rome Manufacturing Co., Rome, N. Y.	80	1,000	Do.
Controversy, furnace men, crane operators, and laborers, Cleveland Furnace Co., Cleveland, Ohio.	31	320	Do.
Strike, Hunt, Helm, Ferris & Co., Harvard, Ill.	225	25	Adjusted.
Strike, stationary engineers in hotels, Atlantic City, N. J.	108	.....	Unable to adjust.
Strike, shoe workers, Thos. G. Plant factory, Boston, Mass.	1,600	2,000	Pending.
Strike, silk workers, Eagle Co., Treverton, Kulpmont, and Shamokin, Pa.	2,800	.....	Do.
Controversy, plumbers, Fort Wayne, Ind.	100	.....	Do.
Controversy, machinists, toolmakers, and others, Rutenber Motor Co., Marion, Ind.	6	550	Unable to adjust.
Threatened strike, bricklayers and others, Cosden refineries, Tulsa, Okla.	12	1,200	Adjusted.
Strike, American Hide & Leather Co. and Badger State Tannery, Sheboygan, Wis.	700	.....	Pending.
Strike, bakers, Lonerigan Bakery, York, Pa.	8	.....	Adjusted.
Strike, pulp and paper makers, Stevens Point Pulp & Paper Mills, Stevens Point, Wis.	54	.....	Do.
Strike, Liberty Laundry, Fort Worth, Tex.	18	14	Pending.
Strike, bookbinders, pressmen, and assistants, Commercial print shops, Louisville, Ky.	200	.....	All suggestions and offers of commissioner were rejected.
Strike, car builders, blacksmiths, machinists, and foundrymen, American Car & Foundry Co. (car department), Chicago, Ill.	490	75	Pending.
Threatened strike, flour mill workers, New Ulm Roller Mill Co., New Ulm, Minn.	6	16	Company insists it is not involved in controversy with its employees. Will not recognize union, or treat with a committee, and insists that no demands have been made by any of its employees. Refused to take up matter with commissioner.
Strike, ironworkers, concrete laborers, and hoisting engineers, Jersey City, N. J.	700	2,000	Adjusted.
Strike, bricklayers and stone masons, Cleveland, Ohio.	1,400	.....	Do.
Strike, stockyard handlers, Wichita, Kans.	.....	.....	Pending.
Threatened strike, bakery employees, Bromm Baking Co., Richmond, Va.	15	25	Do.
Controversy, carpenters, Bucyrus, Ohio.	.....	.....	Do.
Controversy, Texas Producing Department, Electra, Tex.	34	500	Do.
Strike, piano workers, Cable Piano Co., St. Charles, Ill.	240	40	Do.
Lockout, paper makers, Rock Falls Box Board Co., Rock Falls, Ill.	145	20	Do.
Threatened strike, machinists, Schroeder Headlight & Generator Co., Evansville, Ind.	33	150	Do.
Strike, flour mill workers, Marshall Milling Co., Marshall, Minn.	70	20	Do.
Strike, bakers, Seattle, Wash.	120	.....	Adjusted.
Strike, Haskell & Barker Co., Michigan City, Ind.	2,800	.....	Pending.
Threatened strike, Seattle Gas Co., Seattle, Wash.	.....	.....	Do.
Strike, electrical workers and crane operators, Mesta Machine Co., Homestead, Pa.	12	2,000	Do.
Controversy, P. Burns Saddlery Co. and Hotze & Sons Saddlery Co., St. Louis, Mo.	.....	.....	Do.

STATEMENT SHOWING THE NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR THROUGH ITS COMMISSIONERS OF CONCILIATION, MAY 16 TO JUNE 15, 1916—Concluded.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Threatened strike, shirt makers, Simon Miller, Philadelphia, Pa.	.....	.....	Pending.
Controversy, boss butchers, Kansas City, Mo...	.....	.....	Do.
Controversy, mining district, Couer D'Alene, Idaho.	.....	.....	Do.
Controversy, electrical workers, Water Users Association, Phoenix, Ariz.	.....	.....	Do.
Controversy, Mississippi Pearl Button Co. and Burlington Willow Ware shops, Burlington, Iowa.	.....	.....	Do.
Threatened strike, lumber workers, Tatum Lumber Co., Bonhomie, Miss.	60	300	Adjusted.
Controversy, machinists, Rockford, Ill.....	.....	.....	Pending.
Controversy, pattern makers, American Radiator Co., Buffalo, N. Y.	18	.....	Adjusted.
Threatened strike, butterine workers, J. F. Jelke Co., Chicago, Ill.	480	100	Pending.
Controversy, Hyde-Windlass Co., Bath, Me....	.....	.....	Do.
Strikes, machinists and specialists (tool department), American Car & Foundry Co., Chicago, Ill.	850	135	Do.
Controversy, building trades, Syracuse, N. Y...	.....	.....	Do.
Controversy, leather workers, Benjamin N. Moore & Sons Co., Peabody, Mass.	150	.....	Adjusted.
Threatened strike, flour mill workers, Eagle Roller Mill Co., New Ulm, Minn.	175	100	Do.
Strike, carpenters, painters, sheet metal workers, plumbers, cement finishers, and structural iron workers, Pittsburg, Pa.	4,200	.....	Pending.
Controversy, tailors, Quartermaster's Department of Schuylkill Arsenal, Philadelphia, Pa.	.....	.....	Do.
Lockout, Mead & Johnson Co., Evansville, Ind.	.....	.....	Do.
Strike, Racine, Wis.....	.....	.....	Do.
Controversy, laundry workers, Nashville, Tenn.	.....	.....	Do.

The following cases, noted as pending in the June statement, have been disposed of:

Strike, Cleveland National Machine Co., Cleveland, Ohio.
Controversy, Drummond Packing Co., Eau Claire, Wis.
Strike, building trades, Youngstown, Ohio.
Threatened strike, Keystone Steel & Wire Co., Peoria, Ill.
Controversy, Kingston Shipbuilding Co., Kingston, N. Y.
Strike, Dells Paper & Pulp Co., Eau Claire, Wis.
Controversy, McGuire-Cummings Manufacturing Co., Paris, Ill.
Strike, bakers, Chicago, Ill.
Threatened strike, iron and bridge shop employees, St. Louis and vicinity, Mo.
Controversy, laundry trade, Fargo, N. Dak.
Controversy, Hy-Grade Lamp Co., Salem, Mass.
Controversy, Dubuque Boat & Boiler Works, Dubuque, Iowa.
Threatened strike, employees in highway department, Scranton, Pa.
Threatened strike, Bell Telephone Co., Jacksonville, Fla.
Controversy, American Hide & Leather Co., Chicago, Ill.
Controversy, American Steel & Wire Co., Waukegan, Ill.
Strike, Rath Packing Co., Waterloo, Iowa.
Strike, Porto Rico Leaf Tobacco Co., Comerio, P. R.
Controversy, Constantin & Co., Tulsa, Okla.

Controversy, Illinois Milk Dealers, Chicago, Ill.
Strike, bakery drivers, Chicago, Ill.
Strike, Mathews Bros. Co., Milwaukee, Wis.
Strike, cigar makers, Trenton, N. J.
Strike, hod carriers, Dayton, Ohio.

Compulsory Arbitration in Norway.

AS noted in the MONTHLY REVIEW for September, 1916 (pp. 78, 79), Norway has recognized the principle of compulsory arbitration in the settlement of industrial disputes. The law in question, enacted June 9, 1916, and applicable to the war period in Europe, was reenacted April 4, 1919, to continue until April 1, 1920.

The compulsory investigation of labor disputes, incorporation or registration of associations of employees or employers, and the legal recognition of the collective agreement had already been secured by the arbitration act of August 6, 1915 (MONTHLY REVIEW, November, 1915, pp. 81–85). Under the new law an award of the court of arbitration has the binding effect of a judicial decision. Pending reference to arbitration, conditions of work, hours, and wages continue unchanged except in so far as the parties themselves may agree otherwise. It is illegal to strike in order to determine the application or intent of an award. No award is to continue in force longer than two years unless both parties stipulate otherwise. The former act on compulsory arbitration fixed the term at three years.

For infractions of the award fines ranging from 5 crowns ($1.34) up to as high as 25,000 crowns ($6,700) are assessed against an employer or workman who takes part in or assists in unlawful labor disputes; also against the members of the administration of a trade-union or of an employers' association who take part in or assist in unlawful disputes.

The court of arbitration consists of a chairman and four additional members. The chairman and two members are appointed by the Crown. The National Federation of Trade-Unions and the Norwegian Employers' Association each appoint one member and an alternate. Under the former law the Crown appointed the chairman only, while the four members were appointed by the associations representing, respectively, the workmen and the employers. If the parties in interest fail to appoint their representatives the Crown may act.

The usual court processes are observed by the arbitration body, witnesses are summoned, and documents called for in the usual manner. If requested by either party, the proceedings may be behind closed doors.

PROFIT SHARING.

New Profit-Sharing Plan Adopted by British Shipbuilding Firm.[1]

CONSIDERABLE discussion has been caused by the announcement that Messrs. William Gray & Co. (Ltd.), a large shipbuilding firm of West Hartlepool (England), has adopted a system of copartnership with its workers. The plan is to set aside 20 per cent of the total profits of the firm for division among the workers, the amount to which each employee is entitled to be based upon the earnings, exclusive of overtime, to be dependent upon his having attained the age of 21 years, having been in the employment of the company for not less than 12 months and, most important from the point of view of the firm, having lost, through his own fault, not more than 12 days' time in the year the profits of which are being divided. There are provisions for determining what is really lost time, so that no worker may be penalized for circumstances for which he could not be held responsible.

About nine years ago, Messrs. Furness Wilthy & Co. adopted in their yards at West Hartlepool a scheme whereby the workers were made shareholding partners and guaranteed a dividend of 4 per cent. Deductions were made from the workmen's pay in order to purchase shares in the company for them. This ambitious plan failed because of opposition from the labor unions based upon the irregularity of work, which had reduced earnings and made the lower-paid operatives desirous of keeping all their wages instead of contributing their proportion to the copartnership funds, upon the fact that the workers could not go to other yards without losing their dividends, and upon the belief that partnership would tie their hands as trade-unionists in disputes with their employers.

Sir William Gray has provided a system of profit sharing without making the workers shareholders in the firms, and so without reducing their current earnings. The provision with regard to strikes states that time lost by reason of a general or district strike, whether authorized by trade-unions or not, will not be considered time willfully lost, while there is no reference in the scheme to strikes in breach of an agreement with employers generally. It would seem therefore that men may strike in defiance of their own unions, and in breach of an agreement, and still qualify for a share in the profits which the firm may be able to make in spite of their action. Whether these inducements will be sufficiently powerful to secure continuous and energetic labor in the yards and whether they will be acceptable to trade-unions remains to be seen.

[1] Excerpt from Report on British Trade and Commerce, by Consul General Robert P. Skinner, London, furnished by the State Department under date of May 24, 1919.

IMMIGRATION.

Immigration in April, 1919.

The following tables, prepared by the Bureau of Immigration of the Department of Labor, show the total number of immigrant aliens admitted into the United States in each month from January, 1913, to April, 1919, and the numbers admitted in each fiscal year, 1915 to 1918, and in April, 1919, by nationality. The total departures of emigrant aliens in April, 1919, numbered 17,203.

IMMIGRANT ALIENS ADMITTED INTO THE UNITED STATES IN SPECIFIED MONTHS JANUARY, 1913, TO APRIL, 1919.

Month.	1913	1914	1915	1916	1917	1918	1919	
							Number.	Per cent increase over preceding month.
January	46,441	44,708	15,481	17,293	24,745	6,356	9,852	[1] 8.3
February	59,156	46,873	13,873	24,710	19,238	7,388	10,586	7.5
March	96,958	92,621	19,263	27,588	15,512	6,510	14,105	33.2
April	136,371	119,885	24,532	30,560	20,523	9,541	16,860	19.5
May	137,262	107,796	26,069	31,021	10,487	15,217	.....	.....
June	176,261	71,728	22,598	30,764	11,095	14,247	.....	.....
July	138,244	60,377	21,504	25,035	9,367	7,780	.....	.....
August	126,180	37,706	21,949	29,975	10,047	7,862	.....	.....
September	136,247	29,143	24,513	36,398	9,228	9,997	.....	.....
October	134,440	30,416	25,450	37,056	9,284	11,771	.....	.....
November	104,671	26,298	24,545	34,437	6,446	8,499	.....	.....
December	95,387	20,944	18,901	30,902	6,987	10,748	.....	.....

[1] Decrease.

Classified by nationality, the number of immigrant aliens admitted into the United States during specified periods and in April, 1919, was as follows:

IMMIGRANT ALIENS ADMITTED INTO THE UNITED STATES DURING SPECIFIED PERIODS AND IN APRIL, 1919, BY NATIONALITY.

Nationality.	Year ending June 30—				April, 1919.
	1915	1916	1917	1918	
African (black)	5,660	4,576	7,971	5,706	521
Armenian	932	964	1,221	221	12
Bohemian and Moravian	1,651	642	327	74	20
Bulgarian, Serbian, Montenegrin	3,506	3,146	1,134	150	13
Chinese	2,469	2,239	1,843	1,576	74
Croatian and Slovenian	1,912	791	305	33	1
Cuban	3,402	3,442	3,428	1,179	155
Dalmatian, Bosnian, Herzegovinian	305	114	94	15	.....
Dutch and Flemish	6,675	6,433	5,393	2,200	291
East Indian	82	80	69	61	3
English	38,662	36,168	32,246	12,980	3,890
Finnish	3,472	5,649	5,900	1,867	102
French	12,636	19,518	24,405	6,840	1,649
German	20,729	11,555	9,682	1,992	254
Greek	15,187	26,792	25,919	2,002	116
Hebrew	26,497	15,108	17,342	3,672	317
Irish	23,503	20,636	17,462	4,657	1,075
Italian (north)	10,660	4,905	3,796	1,074	130
Italian (south)	46,557	33,909	35,154	5,234	217
Japanese	8,609	8,711	8,925	10,168	507
Korean	146	154	194	149	2
Lithuanian	2,638	599	479	135	21
Magyar	3,604	981	434	32	14
Mexican	10,993	17,198	16,438	17,602	3,126
Pacific Islander	6	5	10	17	.....
Polish	9,065	4,502	3,109	668	191
Portuguese	4,376	12,208	10,194	2,319	456
Roumanian	1,200	953	522	155	3
Russian	4,459	4,858	3,711	1,513	184
Ruthenian (Russniak)	2,933	1,365	1,211	49	9
Scandinavian	24,263	19,172	19,596	8,741	1,146
Scotch	14,310	13,515	13,350	5,204	1,483
Slovak	2,069	577	244	35	2
Spanish	5,705	9,259	15,019	7,909	388
Spanish-American	1,667	1,881	2,587	2,231	279
Syrian	1,767	676	976	210	17
Turkish	273	216	454	24	.....
Welsh	1,390	983	793	278	111
West Indian (except Cuban)	823	948	1,369	732	153
Other peoples	1,877	3,388	2,097	314	18
Total	326,700	298,826	295,403	110,618	16,860

BOOK REVIEWS.

COMMONS, JOHN R. *Industrial goodwill. New York, McGraw-Hill Book Company, Inc., 1919. 213 pp.*

Beginning with an explanation of the "commodity" theory of labor (that labor can be bought and sold and that demand and supply determine wages, a law that can not be overcome), and of the "machinery" theory (that not labor, but the product of labor, is bought and sold), the author declares that both of these theories are incomplete and that the law of supply and demand may be modified by industrial good will, which is "the spirit of brotherhood, the solidarity of free personalities." "It is knowledge of alternatives and freedom to choose them without penalty or sacrifice." The goodwill of a firm is a competitive advantage in keeping desirable customers or workers away from rivals.

Group insurance is advocated. By group insurance may be provided not only life insurance but the old-age pension and invalidity benefits. Group insurance is believed to be followed by reduction in the number of strikes, reduction in labor turnover, and reduction in the power of organized labor to attract employees away from their allegiance to their employer. In the author's opinion, the objection that group insurance promotes the laborer's welfare at the cost of his liberty can be met by making group insurance compulsory on all employers.

Health insurance is also favored. This kind of insurance, the prime object of which is the prevention of illness, is also a factor in industrial good will. The author believes in compulsory health insurance, and in the establishment by the State of certain minimum standards. Cash benefits should be eliminated from the scheme, and should be left entirely to voluntary schemes. "If cash benefits are required by law, then the thought and energies of employers, employees, and State officials are diverted away from the prime object of health insurance, which is sickness prevention with its medical and hospital care and early diagnosis. If cash benefits are required by law, then innumerable disputes arise as to the amount of benefits; the dangerous menace of malingering is forced into the problem; suspicion and invidious investigations of individuals are fomented by law. But with cash benefits eliminated from the requirements of the law, all of the funds and all of the energies of all parties, so far as legislation is concerned, are directed to the single purpose of adequate care for sickness, adequate hospital and medical equipment, and adequate measures of prevention."

Admission of labor into the councils and authority of the company through the recognition of "shop committees" representing the workers is another way of obtaining industrial good will. This is a great forward step, inasmuch as the shop conditions, in the opinion of the author, are very important, because "it is the shop after all that constitutes the real unit of organization."

He believes that "American industry needs schools for apprentices. These schools must be in the shops and the apprentices must get a living wage while learning."

Through an examination of these various related problems in industry the author develops his theory of industrial good will as the soul of the economic peace toward which constructive thought and action are moving more or less gropingly but hopefully. And his concept of this good will finds its fullest expression in the chapter on personality. It is in personality that the author is forced to anchor all reasonable hopes for the normal life and development of this industrial good will which is to solve

labor problems and to still labor unrest. He believes in the education of the workers, the protection of the workers, and the joint control of work by the workers. He also believes in the modern corporation, and says "The modern corporation has more chances for personality than ever were known before in industry. And it succeeds for that reason. If it has no monopoly it succeeds because it has a soil. Good will is the soul and good will is a multiple of all the different personalities that keep the business agoing." The modern corporation specializes in personality, and the result of this specialization is the personnel department. The reason why this personnel department is attaining this high recognition is because the labor problem has ceased to be a problem merely of the demand and supply of labor. The personnel department is not the employment department. It is not the department of hiring and firing. It is the department that deals with every human relation within and without the establishment. It is the department of industrial good will." In the chapter on "The world," he says, "We and all the nations perceive, as never before, that the next stage in industrial progress is not that economic revolution which Karl Marx predicted, it is not even development in machinery and tools, but it is the increased production and increased wealth of the world which are now dependent upon the health, intelligence, good will of labor. That nation which is foremost in giving heed to the health and housing, the vocational education, security, and wages of its working people will be the nation which will survive even in time of peace."

SLICHTER, SUMNER H. *The turnover of factory labor. New York, D. Appleton & Co., 1919. 460,18 pp.*

This book provides the first comprehensive and systematic treatment of the subject of labor turnover so far published in the United States. The author makes the turnover of labor his central theme, but treats the subject very broadly and presents a systematic discussion of method and practice in handling men. The work, in other words, is a study of employment management as well as of labor turnover, the author's central thesis being "the neglected truism that a definite plan and specific responsibility for creating and executing the plan are as necessary in dealing with labor as in controlling manufacturing operations." The study of turnover "embraces the study of the causes and effects of every termination of employment and the means of preventing such terminations of employment as are socially undesirable."

The data on which the work is based were collected for the most part prior to 1916, and the book is therefore primarily a study of establishment labor stability in normal peace times. The illustrative material has been largely restricted to pre-war years, and it is discussed and interpreted from the standpoint of the relatively undisturbed pre-war period. The four main sections of the book are devoted to a general analysis of turnover, its cost, its causes, and the methods of reducing it. In the section devoted to analysis Mr. Slitcher considers the volume or rate of turnover, the effect upon the turnover rate of such factors as time, locality, and occupation, and the relative numerical importance among employees leaving, of resignations, lay-offs, discharges, etc.

The statistical analysis which makes up the bulk of Part I is based primarily upon figures collected by the author for the United States Commission on Industrial Relations. These figures were secured from 105 factories and mines in all the important industries and in practically all parts of the country. Sixty-seven of the establishment reports were for 1914, 20 for 1913, 8 for 1912, and the others for various 12-month periods in the years 1909 and 1912 to 1915. The author defines labor turnover as "all terminations of employment in the force regardless of cause." He goes on to say that "every worker who leaves the employ of a given establishment for whatever reason constitutes a part of the turnover of that establishment." Consistently with this interpretation he expresses the rate of turnover as "the percentage of the number of

terminations of employment to the average force on the pay roll during a given period." This formula is slightly modified, however, in presenting the returns from the 105 concerns which form the back-bone of his statistical analysis. The difficulty of obtaining figures showing the average working force made it necessary to resort instead to the average between the "maximum and minimum number of employees on the pay roll at any time during the year." This average Mr. Slichter uses as a base in calculating the turnover.

The turnover rate varies, of course, with time and place. It is the opinion of the author of the book that the average turnover, in a normally prosperous year, is about 100 per cent. Among his 105 establishments he finds that 5 had a turnover of less than 20 per cent, 29 between 20 and 60 per cent, 30 between 60 and 100 per cent, 30 between 100 and 200 per cent, and 11, 200 per cent or over. The aggregate averages of minimum and maximum forces of the 105 plants amounted to 226,038, and the grand total of separations from them 225,942.

The effect of prosperity is reflected in relatively low stability; that is to say, high turnover; industrial depression shows itself in relatively high stability, the turnover frequently being almost uniformly higher in prosperous years like 1913 and 1916 than in years of depression, such as 1914 and 1915. The figures presented by occupations indicate a considerably higher turnover rate, in industry generally, among semiskilled and unskilled than among skilled laborers. As to the immediate circumstances under which employees leave, which this writer includes among causes of turnover, it appears that of more than 28,000 terminations, 78 per cent were due to resignations, 12 per cent to discharges, 10 per cent to lay-offs, and less than 1 per cent to "miscellaneous reasons."

The subject of the cost of turnover is examined from the point of view of the employer on the one hand and of the workman on the other. Fragmentary estimates of money costs to the employer are compiled by the author. They range from Magnus W. Alexander's estimate of $8.50 for laborers to a street railway official's estimate of $370.43 for street railway trainmen. The following items are presented of loss to the workmen: (1) Loss of earnings during unemployment; (2) expense of obtaining a new job; (3) deficiency in earnings while learning new job; (4) increased exposure to accident while learning new job; (5) possible cost of moving involved; (6) impairment of developed skill by interruption of employment; and (7) demoralization from idleness.

In a chapter devoted to a "survey of the causes of turnover" the multitude of conditions resulting in termination of employment are classified in eight principal groups, as follows:

1. Reduction in the quantity of work.
2. Causes pertaining to the job.
3. Causes pertaining to the methods of handling men.
4. Causes pertaining to fellow workmen.
5. Causes pertaining to the worker himself.
6. More attractive opportunities elsewhere.
7. Causes pertaining to the attractiveness of the community as a place of residence.
8. Changes due to the family of the worker.

An important distinction is made between separations due to better opportunities elsewhere and resignations due to dissatisfaction and figures are presented which show that "where conditions are attractive not only do fewer men resign, but those who do, resign not because of dissatisfaction but because of still more favorable opportunities elsewhere." "Unadaptability," "shiftlessness," and "positive misconduct" appear to cause the greater number of discharges, so far as may be judged from the fragmentary statistical evidence available.

Nearly half of the volume is taken up by the section devoted to methods of reducing turnover. The first part of this section describes in detail the achievements in turnover reduction of a number of selected establishments and explains the methods severally used by them in effecting this reduction. The most important features of a job to a workman are, it is stated, the wages, its steadiness, its physical and nervous demands upon him, and the hours. These, then, are what the author describes as "the fundamental prerequisites for the reduction of turnover." That the author considers the character and practical administration of the establishment's employment machinery to be important factors in turnover reduction is sufficiently indicated by the fact that he follows up the discussion of these prerequisites by detailed chapters on procedure in hiring, breaking in the new worker, and the handling of men. A comprehensive discussion of the functions of the establishment "supervisor of labor" and of the relation of such a supervisor to the conflict between capital and labor completes the volume.

PUBLICATIONS RELATING TO LABOR.

Official—United States.

CALIFORNIA.—*Industrial Accident Commission. Safety News. San Francisco, April, 1919. Vol. 3, No. 4. 15 pp. Illustrated.*

Principally devoted to an article giving safety recommendations relating to the removal of dust, gases and fumes in factories.

COLORADO.—*Industrial Commission. Second report. Dec. 1, 1917, to Dec. 1, 1918. Denver, 1919. 128 pp.*

Contains a brief statistical statement of workmen's compensation experience; is largely devoted to a record of appealed cases and decisions of the commission. Premiums to the amount of $375,429.56 were paid into the State compensation insurance fund, and compensation and medical services were paid to the amount of $51,391.68. The fund showed a balance of $566,050.86 on December 31, 1918, with liabilities amounting to $431,265.77, leaving a net surplus of $134,785.09. There was a 92 per cent increase in the premium income over the preceding year; and a 130 per cent increase in the net surplus.

—— *State inspector of coal mines. Sixth annual report, 1918. Denver, 1919. 104 pp.*

Reports a coal production in 1918 of 12,658,055 tons from 249 mines. The total number of men employed in and about the mines was 14,374, of which number 7,517 were miners, 3,833 other underground employees, and 3,024 surface employees. There were 566 men employed at coke ovens. There were 71 fatalities, a reduction of 117 when compared with 1917, when 121 were killed as the result of one explosion. Of the killed, 69 were underground and 2 surface employees. There was one fatality to every 177,578 tons of coal produced, representing a fatality rate of 4.9 per 1,000 men employed. There were 1,227 nonfatal accidents, a decrease of 236 compared with 1917. The accident rate was 85.5 per 1,000 men employed, and 10,275.5 tons of coal were produced for each nonfatal accident.

CONNECTICUT.—*Board of commissioners for the promotion of uniformity of legislation in the United States. Report. Hartford, 1919. 8 pp.*

—— *Department of Labor and Factory Inspection. Report on the conditions of wage earners in the State. Hartford, 1918. 144 pp.*

A discussion of conditions prevailing among industrial workers in the State during the years 1917–18. Deals with such subjects as the increased employment of women during the war period, effects of the influenza epidemic, safety precautions, welfare work, Americanization, housing, young mothers in industry, lunch rooms in factories, etc. The report concludes with 12 recommendations, covering the requirements of certain standards of sanitation, safety, and health in factories, the establishment of prevocational and vocational courses in grade and grammar schools, the extension of physical culture exercises to all schools for both boys and girls, and the passage of a law preventing the employment of young mothers in both textile and metal industries.

FLORIDA.—*State Labor Inspector. Fourth and fifth annual reports. [1917–18.] Tallahassee, 1919. 66 pp.*

ILLINOIS (CHICAGO).—*Department of Public Welfare. Bureau of Surveys. The Italian in Chicago. A study, by Frank Orman Beck. Chicago, February, 1919. 32 pp. Bulletin. Vol. 11, No. 3. Department Serial No. 8.*

MASSACHUSETTS.—*Teachers' Retirement Board. Fifth annual report for the year ending Dec. 31, 1918. Boston, 1919. 17 pp. Public Document No. 109.*

Notes that the enrollments in 1918 were 1,902 compulsory and 80 voluntary, the compulsory enrollments being 243 more than in any previous year in that class. The total membership in active service at December 31, 1918, was 10,839; 65 retired on allowances during the year; and 338 represented the number on the retired list at the end of the year. A total of $113,843.14 was paid in the form of annuities and pensions, the latter amounting to $111,058.04. The number of deaths was 83, almost double those of any previous year. The influenza epidemic is given as the reason for the unusually high death rate among teachers. A total of $12,839.28 has been paid on account of deaths since the establishment of the fund, July 1, 1914.

MISSOURI (ST. LOUIS).—*City Plan Commission. St. Louis after the war. St. Louis, 1918. 31 pp.*

This pamphlet gives, besides other matter, a plan of specific public works needed in St. Louis, including river front improvements, waterworks extension, public buildings and public group plan, park and playground system, public sewers, street openings, housing, and other matters, and recommends the passage of necessary laws which would permit the accomplishment of the work outlined. There is an introduction by Winston Churchill.

NEW YORK.—*Industrial Commission. Proceedings of the Third Industrial Safety Congress of New York State held at Syracuse, December 2–5, 1918. Albany, 1919. 225 pp.*

OHIO.—*Food Administration. A brief history of the activities of the United States Food Administration in Ohio. Columbus, 1919. 91 pp.*

Outlines the various measures which were taken to encourage food production and food conservation during the period of the war. A section on farm labor gives a record of placements and notes the achievements accomplished in food production with the assistance of boy labor.

PORTO RICO.—*Laws, statutes, etc. Acts and resolutions of the first session of the ninth legislature of Porto Rico. [San Juan], 1919. 38 pp. (Appendix to Vol. II of Laws of Porto Rico, 1917.)*

This pamphlet contains "certified transcripts of the originals of certain laws and resolutions promulgated and published in virtue of a decision of the Supreme Court of Porto Rico, dated the 11th of March, 1919." A more extended reference appears on p. 231 of this issue of the REVIEW.

UTAH.—*Industrial Commission. Report. July 1, 1917 to June 30, 1918 including fourth biennial report of the bureau of immigration, labor and statistics, 1917–18. Salt Lake [1919]. 237 pp.*

WASHINGTON.—*Bureau of Labor. Labor laws. Edition 1919. Olympia, 1919. 128 pp.*

WEST VIRGINIA.—*State compensation commissioner. Condensed statement as of June 30, 1918. Charleston [1918]. 15 pp.*

This report is noted on pages 211 and 212 of this issue of the REVIEW.

UNITED STATES.—*Congress. Senate. Committee on Education and Labor. Minimum wages. Hearing before subcommittee of the committee on education and labor on H. R. 152, a bill to fix the compensation of certain employees of the United States. 2 parts. Washington, 1919. 129 pp.*

—— *Council of National Defense. General medical board, committee on nursing; committee on hygiene and sanitation, subcommittee on public health nursing; committee on labor, section on welfare; committee on home nursing. Reports. Washington, April, 1, 1919. 31 pp.*

—— *Department of the Interior. Bureau of Education. Agricultural education, 1916–1918, by C. H. Lane. Bulletin, 1918, No. 44. Washington, 1919. 40 pp.*

—— —— —— *Recent progress in Negro education, by Thomas Jesse Jones. Washington, 1919. 16 pp. Bulletin No. 27.*

UNITED STATES.—*Department of the Interior. Bureau of Education. The United States School Garden Army, by J. H. Francis, director. Washington, 1919. 6 pp. Bulletin No. 26.*

The work of this organization is an expansion of that undertaken by the Bureau of Education in 1914, which consisted in enlisting boys and girls between the ages of 9 or 10 and 14 or 15 in systematic garden work for food production on such plats of ground as could be had for this purpose near their homes, on back yards, side yards, and vacant lots, and then providing teacher-directors for them at the rate of one teacher-director for each group of from 100 to 150 garden workers. In March, 1918, $50,000 was appropriated from the National Security and Defense fund to promote school and school-supervised home gardening among the school children of America residing in cities, towns, and villages. The present plan was adopted shortly afterwards, and suggestions on plans of organization were sent out to school superintendents and garden teachers and supervisors. A partial report made in July, 1918, showed, among other results, that 1,500,000 boys and girls were enlisted in the United States School Garden Army; that 20,000 acres of unproductive home and vacant lots had been converted into productive land; that 50,000 teachers had received valuable instruction in gardening through the garden leaflets distributed through the office of the School Garden Army; and that boards of education and other civic organizations had been influenced to give financial and moral support to the school and home garden movement and to pay extra salaries for supervision and teaching. Under this organization the School Garden Army is working during the present season.

—— —— *Bureau of Mines. Illinois mining statutes annotated, by J. W. Thompson. Including all Illinois mining laws. Washington, 1919. 594 pp. Bulletin 169, Law Serial 15.*

—— *Department of Labor. Children's Bureau. Minimum standards for child welfare. Submitted by the Washington Child Welfare Conference, May 5–8, 1919. Washington, 1919. 16 pp.*

Contains the text of the minimum standards for children entering employment, the minimum standards for public protection of the health of mothers and children, and the minimum standards for the protection of children in need of special care, submitted by the conference. The former were printed in the June issue of the MONTHLY LABOR REVIEW, pp. 219 and 220.

—— —— *Information and Education Service. Suggestions for own-your-own-home campaigns. Washington, 1919. 46 pp.*

—— —— *Training Service. Efficient training in a large plant. Washington, 1919. 13 pp. Training bulletin No. 11.*

—— —— —— *How training departments have bettered production. A symposium of experiences in 17 American factory training departments, together with valuable suggestions as to how to carry on instruction. Washington, 1919. 24 pp. Training bulletin No. 12.*

—— —— —— *Industrial training in representative industries. A survey of practical value to the man who wants to know how training departments operate. Washington, 1919. 15 pp. Training bulletin No. 13.*

—— —— *Working Conditions Service. How to give illustrated lectures on accident prevention to workmen. Washington, 1919. Washington, 1919. 13 pp.*

From this pamphlet it appears that the most effective way to promote accident prevention is through the use of short talks about 30 or 40 minutes long, illustrated with slides and moving pictures showing the results of accidents rather than how to avoid them; that these lectures and pictures, where there is a large percentage of foreigners, should be held at the noon hour in the dining room of the men, or, in the case of evening meetings, at 7.30 or 8 o'clock. It is suggested that the evening meeting should be held in some central location and should be made a family affair.

UNITED STATES.—*Department of Labor. Working Conditions Service. Investigation into dermatic effect and infective character of a lubricating compound. Washington, 1919. 8 pp.*

This investigation, made to determine the cause of an epidemic of furunculosis among the employees of a steel plant, showed that while the lubricant, which consists of almost equal parts of pale paraffin oil and petrolatum, does not afford a favorable nutrient medium for bacterial growth, it still is not germicidal, so that after becoming contaminated by being handled by an employee having a pus infection present upon his hands or arms, it may, through the interchange of "waste" and wiping rags, easily carry infection. It is recommended, among other things, that the interchange of wiping rags be advised against and that instruction in personal hygiene be given the men.

—— —— —— *Preliminary report of committee on mortality from tuberculosis in dusty trades. Washington, 1919. 27 pp.*

This report was submitted to the executive committee of the National Tuberculosis Association at its meeting in Pittsburg, December 5, 1918.

—— —— —— *Treatment of industrial problems by constructive methods. Washington, 1919. 15 pp.*

This pamphlet is a description of the organization of the Working Conditions Service of the Department of Labor—a service created to supply industries with information which will assist them in developing a stable, efficient working force through the adoption of proved methods of industrial health and safety, and of principles that promote good relationship between employers and employed. There are three divisions in the Working Conditions Service: (1) Industrial hygiene and medicine, (2) safety engineering, and (3) labor administration.

—— *Federal Board for Vocational Education. Evening and part-time schools in the textile industry of the southern States. Bulletin No. 30, Washington, 1919. 106 pp. Trade and industrial series No. 5.*

This report is based upon the results of an investigation made in 13 Southern States to determine the needs and possibilities of training for the textile industry. It explains the application of the Federal vocational education law to the textile industry and the possible types of instruction under the law, outlines short-unit courses in evening and part-time classes for textile workers, and presents an analysis of textile occupations as a basis of recommending courses of instruction.

—— —— *Home economics education. Organization and administration. Washington, February, 1919. 64 pp. Bulletin No. 28. Home economics series No. 2.*

—— —— *Opportunities for employment in the jewelry trade: Designing, modeling, engraving, stone cutting, melting and rolling, pressing and stamping, die making. Washington, March, 1919. 8 pp. Opportunity monograph, Vocational rehabilitation series No. 32.*

—— —— *Photography, photo-engraving and three-color work. Washington, March, 1919. 7 pp. Opportunity monograph, Vocational rehabilitation series No. 31.*

—— —— *Technical agriculture as a vocation. Washington, March, 1919. 20 pp. Opportunity monograph, Vocational rehabilitation series No. 33.*

—— —— *The practice of optometry and the training it requires. Washington, April, 1919. 7 pp. Opportunity monograph, Vocational rehabilitation series No. 34.*

—— *Shipping Board. World shipping data. Report on European mission, by Edward N. Hurley, chairman. Washington, March 1, 1919. 32 pp.*

Presents statistics showing the losses of tonnage and the output of shipyards during the war, the present situation of the merchant marine of the leading countries, and an estimate of the prospects of these countries for developing their shipping. Sections are devoted to a discussion of the labor situation, the future of American seamen, shipbuilding costs, and operating costs.

Official—Foreign Countries.

ARGENTINA.—*Departamento Nacional del Trabajo. Boletín No. 41, April, 1919. Buenos Aires, 1919. 129 pp.*

This bulletin is the third study of the development of labor organization in Argentina, the first two studies having appeared in the previous two numbers of this series. The study has been prepared by an inspector under the supervision of the department of labor. The author says "the first organization was formed in 1890" and that at the present date "there are two great confederations, with 23 syndicates in the federal capital and 41 in other portions of the Republic, and a membership of 63,149."

The second chapter of the present bulletin is a history of labor disputes between November 30, 1916, and the present date. Chapter III is devoted to measures, declarations, and demands emanating from recent conventions of the federations.

AUSTRALIA.—*Department of the Treasury. Invalid and old-age pensions. Statement for the 12 months ended 30th June, 1918. Melbourne, 1918. 10 pp. No. 115.—F. 12699. Price, 6d.*

At June 30, 1918, there were 95,387 old-age pensions and 29,912 invalid pensions current, an increase over the preceding year of 1,715 and 3,131, respectively. The total liability for the year is given as £2,993,354 ($14,567,157.24) for old-age pensions, and £954,304 ($4,644,120.42) for invalid pensions. It is stated that 85.43 per cent of the old-age pensioners and 93.16 per cent of the invalid pensioners were receiving the maximum of £32 10s ($158.16) per annum. On June 30, 1918, there were 193 old-age pensioners and 61 invalid pensioners to each 10,000 of population.

—— —— *Maternity allowances. Statement showing number of claims granted and rejected, expenditure, and cost of administration during the 12 months ended 30th June, 1918. Melbourne, 1918. 3 pp. C. 12696.*

Shows a total of 126,885 claims paid and 404 rejected. The amount of benefits paid was £634,425 ($3,087,429.26). The number of claims paid was a decrease of 5,522 from the preceding year, and the amount of benefits paid was $134,364.07 less than in 1916–17.

—— —— *War pensions. Statement for the 12 months ended 30th June, 1918. Melbourne, 1919. 8 pp. C. 2251.*

Shows a total of 110,174 war pensioners at June 30, 1918, of which number 40,702, or 36.9 per cent, were incapacitated members of the forces, and 69,472, or 63.1 per cent, dependents of incapacitated or of deceased members of the forces. The average fortnightly rate of pensions is given as £1 16s 5.1d ($8.86) for members of the forces, and £1 1s 3.32d ($5.18) for dependents. The total expenditure for war pensions in the year ending June 30, 1918, was £2,772,077 ($13,490,312.72). The cost of administration is given as £61,146 ($297,567.01), or £1 11s 9d ($7.73) for each £100 ($486.65) of pensions paid.

BELGIUM.—*Ministère de l'Industrie, du Travail et du Ravitaillement. Office du Travail-Statistique des accidents du travail élaborée par l'Office du Travail d'après les documents fournis en exécution de la loi du 24 décembre 1903 sur la réparation des dommages résultant des accidents du travail. Année 1907. Brussels, 1919. 417 pp.*

Statistics of labor accidents for 1907. Gives tables by industries of accidents causing a temporary incapacity of at least 29 days; accidents causing permanent incapacity; accidents resulting in death; accidents by age of the victims; and other related information.

CANADA.—*Commission of Conservation. Reports. Seventh annual meeting held at Ottawa, January 18, 19, 1916. 283 pp. Eighth annual meeting held at Ottawa, January 16, 17, 1917. 344 pp. Ninth annual meeting held at Ottawa, November 27, 28, 1917. 282 pp. Ottawa, 1916–18. 3 vols. Illustrated.*

CANADA (ALBERTA).—*Workmen's Compensation Board. First Annual Report, 1918. 19 pp.*

A summary of this report will be published in the August issue of the MONTHLY LABOR REVIEW.

—— (BRITISH COLUMBIA).—*Department of Labor. Annual report for the year ending December 31, 1918. Victoria, 1919. 76 pp.*

Data as to wages taken from this report appear on pages 152 and 153 of this issue of the REVIEW.

—— (NOVA SCOTIA).—*Workmen's compensation board. Report for 1918. Halifax, 1919. 33 pp.*

This report is noted on page 212 of this issue of the MONTHLY LABOR REVIEW.

—— (ONTARIO).—*Workmen's Compensation Board. Report for 1918. Toronto, 1919. 72 pp.*

This report is noted on pages 213 and 214 of this issue of the REVIEW.

FRANCE.—*Ministère de la Guerre. Bulletin Officiel. Tables Chronologique et Alphabétique des Recueils des Documents Insérés au Bulletin Officiel, et specialement applicables pendant la durée des hostilités. Paris [1918]. 329 pp.*

This volume consists of alphabetical and chronological indexes of documents published in the Official Bulletin, volumes 1 to 6 and supplement, inclusive.

—— *Ministère du Travail et de la Prévoyance Sociale. Actes et documents Officiels. Mesures tendant à maintenir l'activité nationale pendant la demobilisation. Paris, 1919. 72 pp.*

This report is noted on pages 232 to 234 of this issue of the REVIEW.

—— —— *Notice à l' Usage des Assurés de la loi des Retraites ouvrières et Paysannes. Troisième edition. Paris, 1917. 60 pp.*

Handbook of information relative to obligatory insurance.

—— (DÉPARTEMENT DE LA SEINE).—*L'Office des Habitations a Bon Marché La Constitution; son action et ses travaux du 10 juillet 1916 au 31 décembre 1918. Paris, 1919. 195 pp. Illustrated.*

Text of the constitution and laws governing the office of low-cost dwellings of the Department of the Seine and an account of the work of this office from July 10, 1916, to December 31, 1918. The first part of the volume, which is devoted to a report by Henri Sellier on plans for garden cities, is summarized on pages 262 and 263 of this issue of the MONTHLY LABOR REVIEW.

GREAT BRITAIN.—*Agricultural Wages Board. Report of the committee appointed by the Agricultural Wages Board to inquire into the financial results of the occupation of agricultural land and the cost of living of rural workers. London, 1919. 73 pp. Cmd. 76.*

—— *Home Office. Fencing and safety precautions for transmission machinery in factories. London, 1919. 16 pp. Illustrated. Safety pamphlet No. 1.*

—— *Laws, statutes, etc. Manuals of emergency legislation. War material supplies manual [3d edition], revised to December 31, 1918. London, 1918. 576 pp. Price, 5s. net.*

—— *Local Government Board. Committee on Building Byelaws. Building byelaws. Minutes of evidence, with index. London, 1918. 335 pp. Cmd. 9214. Price, 3s. net.*

—— —— *Housing. Financial assistance to public utility societies. London, 1919. 4 pp. Cmd. 89. Price, 1d. net.*

—— —— *Housing. Schemes submitted to the Local Government Board by local authorities. London, 1919. 20 pp. Cmd. 115. Price, 2d. net.*

This presents in tabular form the details of the housing schemes submitted for the approval of the Local Government Board. It is estimated that the 658 schemes submitted provide for considerably over 100,000 houses.

—— —— *Housing by public utility societies. The Government proposals. London, 1919. 16 pp. Price, 1d. net.*

GREAT BRITAIN.—*Local Government Board. Housing, town planning, etc., bill; financial assistance to public utility societies and housing trusts: I. Draft regulations for public utility societies. II. Draft regulations for housing trusts. III. Draft model rules for public utility societies. London, 1919. 12 pp. Cmd. 128. Price, 1d. net.*

——— *Manual on the preparation of State-aided housing schemes. London, 1919. 74 pp. Price, 2s. 6d. net. Illustrated.*

——— *Memorandum on the provisions of the ministry of health bill, 1919, as to the work of the medical research committee. (Clause 3 (1), proviso (i). London, 1919. 6 pp. Cmd. 69. Price, 1d. net.*

——— *Ministry of Reconstruction. Housing (Financial Assistance) Committee. Final report. London, 1919. 19 pp. Cd. 9238. Price, 3d. net.*

This committee published an interim report which outlined the advantages of housing under the direction of public utility societies and the propriety of granting them State subsidies and loans on favorable terms. (See MONTHLY LABOR REVIEW, June, 1919, p. 361.) The committee now presents its recommendation as respects other housing agencies. It is proposed to grant subsidies to special housing, and charitable trusts. Such organizations as the cooperative societies, both building and otherwise, are given a preferential position as respects loans for housing, but are not so liberally treated as the public utility societies and trusts. Amendments are suggested to the small dwellings acquisition act, 1899, increasing the limits of loan value on account of increasing costs and prices of building materials, and empowering local authorities to make advances to persons or bodies not otherwise within the limits of the act named. Municipal housing banks are recommended for the larger municipalities to attract the savings of the working classes and to provide funds for housing. The setting up of a State housing bank is considered unnecessary. It is not considered practicable to offer subsidies to private builders, but at the same time small builders may be assisted by local authorities and may agree to purchase houses erected by such builders under approved scheme.

It is the opinion of the committee that on the whole the building of working-class houses by private enterprise is unlikely unless subsidies are forthcoming.

Among those to whom it is considered impracticable to offer subsidies are: (1) Land owners building for the equipment of their farms and estates; (2) employers building to house their employees; (3) cooperative societies not falling within the definition of public utility societies; (4) companies and bodies formed for the purpose of building improved dwellings for the working classes. It is, however, open to any of these bodies to organize in the form of public utility societies.

If landowners or employers insist upon the houses belonging to them, and being "tied houses," then we think they must bear the full cost, and must regard the houses as part of their "machinery of production." * * * We do not propose to recommend that subsidies should be given to ordinary investors in house property.

——— *Reconstruction problems 17. Art and industry. London, 1919. 20 pp. Price, 2d. net.*

——— *Reconstruction problems 18. Industrial councils: The Whitley scheme. London, 1919. 16 pp. Price, 2d. net.*

——— *Reconstruction problems 19. State regulation of wages. London, 1919 16 pp. Price, 2d. net.*

——— *Reconstruction problems 20. Land settlement. London, 1919. 16 pp. Price, 2d. net.*

——— *Reconstruction problems 21. The classics in British education. London, 1919. 20 pp. Price, 2d. net.*

——— *Reconstruction problems 22. Domestic service. London, 1919. 16 pp. Price, 2d. net.*

——— *Reconstruction problems 23. Public health. I.—A survey. 32 pp. II.—The present problem and the ministry of health. 16 pp. London, 1919. Price, 2d. net each.*

GREAT BRITAIN.—[*Parliament.*] *House of Commons. Standing Committee A on the Ministry of Health Bill. Report, with the proceedings of the committee. London, 1919. 21 pp. Price, 3d. net.*

—— *Treasury. Estimates for civil services for the year ending 31 March, 1920. Unclassified services. London, 1919. 55 pp. Price, 6d. net.*

—— *War Cabinet Committee on Women in Industry. Report. London. 1919. 341 pp. Cmd. 135. Price, 1s. 6d. net.*

Gives review of history of women in industry, discusses the scale of pay hitherto prevailing, and advises a minimum subsistence wage based on cost of support of a single woman with no dependents. Above this minimum wages should be fixed on the general principle that the employer should give equal pay for equal value as between the sexes. Contains also a minority report, strongly urging an occupational rate to be paid the worker, regardless of sex, and a brief discussion of the health of women industrially employed.

—— (IRELAND).—*Department of Agriculture and Technical Instruction. Eighteenth annual general report, 1917–18. Dublin, 1919. 250 pp. Cmd. 106. Price, 1s. net.*

The reports on technical instruction include technical schools and classes, central institutions, the training of teachers, and scholarships.

JAPAN.—*Bureau de la Statistique Générale. Mouvement de la population de l'Empire du Japon pendant l'an IV de Taisho—1915. Tokio, 1918. 347 pp.*

Statistics of births, deaths, marraiges, and divorces in Japan during 1915.

NEW ZEALAND.—*Government Statistician. Statistics for the year 1917. In four volumes. Volume III: Production, finance, postal and telegraph. Wellington, 1918. 232 pp.*

Contains statements regarding Government railways' superannuation fund; Teachers' superannuation fund; Public service superannuation fund; Government life insurance department; also regarding land settled under various specially arranged conditions, operations of friendly societies, and other data of interest to labor.

NORWAY.—*Statistiske Centralbyraa. Beboelses-statistik for enkelte norske byer for 1917 (1916). (Statistique d'habitation pour quelques villes norvégiennes en 1917 (1916).) Christiania, 1918. 65 pp. (Norges officielle statistik, VI: 131).*

For a summary of this report see pages 263 to 266 of this number of the LABOR REVIEW.

SWEDEN.—*Socialstyrelsen. Arbetartillgång, arbetstid och arbetslön inom sveriges jordbruk år 1917. Stockholm, 1919. 51 pp. Sveriges Officiella Statistik, Socialstatistik.)*

Sets forth conditions of labor, wages, and hours in agriculture in Sweden during the year 1917. Since 1911 the hours of labor have declined only very slightly, i. e., 10.5 per day to 10.1 in 1917. These are net hours in summer and do not include rest periods. Hours are shorter in the winter time. The net annual earnings with account being taken of board and lodging, of farmers' hands was 1,146 crowns ($307.13) in 1917, as against 906 crowns ($242.81) in 1916. Female domestics earned 818 crowns ($219.22) in 1917, as compared with 655 crowns ($175.54) in 1916. Among the workmen employed by the day in summer the average wages were 5 crowns ($1.34), and in winter 4.02 crowns ($1.08), or, with food, 3.43 crowns ($0.92) in summer, and 2.63 crowns ($0.70) in winter. Women thus employed, a great number of whom work as assistants in the culture of beets and potatoes and in the harvesting of hay and wheat, receive an average of 2.60 crowns ($0.70) a day in summer, or about 1.74 crowns ($0.47) with food; or sometimes as much as 2.95 crowns ($0.79), or 1.93 crowns ($0.52) with food.

—— —— *Kollektivatal i Sverige år 1917. Stockholm, 1919. vi, 46 pp. Sveriges Officiella Statistik, Socialstatistik.)*

This report on collective agreements in Sweden is noted on pages 126 and 127 of this issue of the REVIEW.

SWEDEN.—*Socialstyrelsen. Statens förlikningsmäns för medling i arbetstvister verksamhet år 1917. Stock- holm, 1919. 121 pp.*

Report of operations under the Swedish conciliation act of December 31, 1906, as amended October 18, 1912. The number of disputes settled by mediation and conciliation in 1917 was 172 as against an average of 73 for the preceding years, 1907 to 1916. Only 115 were completely disposed of at the end of the year. The negotiations affected 1,291 employers and 41,837 workers. Over three-fourths of the disputes disposed of during the year meant stoppage of works. Over four-fifths of the negotiations were effective.

Unofficial.

AMAR, JULES. *The physiology of industrial organization and the reemployment of the disabled. Translated by Bernard Miall. Edited with notes and an introduction by A. F. Stanley Kent. London, The Library Press (Ltd.), 1918. 371 pp. Illustrated.*

The purpose of this book is, as the author states in his preface, "To assist in the work of organizing labor according to rational laws; to assign to each man his true function in the social machine; to enable the hale man and the war-cripple to collaborate in the economic tasks of to-morrow; to formulate concisely the doctrine of the maximum utilization of the physical and psychical energies, without losing sight of the moral factor." The book is addressed to the general public and deals with ordinary avocations. Starting with the history and doctrines concerning human labor, the author considers The organic functions of man, Human psycho-physiology, Work and fatigue, The factors of labor, The art of labor, Apprenticeship, and The reeducation of war cripples—functional and vocational.

AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE. *The Annals. Volume 83, whole No. 172. International economics. Philadelphia, Thirty-sixth Street and Woodland Avenue, May, 1919. 327 pp.*

One section is devoted to International labor and includes articles on The international labor question, by W. Jett Lauck, and Hours of labor in foreign countries, by Leifur Magnusson, of the Bureau of Labor Statistics. An article on Economic internationalism by E. M. Patterson concludes with a consideration of the industrial unrest, as a result of which the author thinks "the workers are to be given a larger share than before in the operation and control of their industries," and that "any extension of the idea of industrial instead of geographical representation in legislative bodies will make for internationalism."

ARMY EDUCATIONAL COMMISSION. *Department of citizenship. Bureau of economic relations. Labor problems and labor legislation. New York, The Cheltenham Press, 1919. 138 pp.*

The object of the pamphlets published by this commission is to present fundamental principles and to stimulate intelligent study of the problems of citizenship by the members of the American expeditionary forces, the Army Educational Commission now being in charge of continuing the educational work of the American expeditionary forces which had formerly been carried on by the Y. M. C. A. These pamphlets present the point of view of eminent publicists and leaders of public opinion of various groups without committing the commission to any particular views on subjects of possible controversy. The present pamphlet deals with the subjects of Employment, Wages, Hours, Safety, Health, Self-government in industry, Social insurance, and Enforcement of laws.

BEST, HARRY. *The blind. Their condition and the work being done for them in the United States. New York, Macmillan, 1919. 763 pp.*

The author's object is to consider the blind, as respects the United States, "from the point of view of the social economist." As most of the 60,000 blind persons in the United States are adults, the subject of chief concern is not the education of blind

children, for that is already well provided for, but the retraining of those adults, who, losing their sight in later life, are thus incapacitated for earning a livelihood in their accustomed manner, and must learn a new trade or be dependent upon relatives or charity. The solution of the problem of provision for the adult blind, according to the author, lies largely along the lines adopted by the Federal Government in its Federal Board for Vocational Education, and it may be hoped that in the near future "provision will be made along similar lines for the treatment of persons blinded in industry or in other walks of common life."

CABOT, RICHARD C. *Social work. Essays on the meeting-ground of doctor and social worker. Boston, Houghton Mifflin Co., 1919. 188 pp.*

In two parts, the first being devoted to Medical-social diagnosis, and the second to Social treatment. Chapters of special interest deal with The social worker's investigation of fatigue, rest, and industrial disease, and The motive of social work.

CANADIAN NATIONAL RECONSTRUCTION GROUPS. *The problems of national reconstruction. A summary by the Standing Committee on Plans and Propaganda. Montreal, October, 1918. 71 pp. Price, 35 cents.*

The organization of these groups was begun a year ago for the purpose of studying the problems which have developed by reason of the war, in connection with the returned soldier, unemployment, the relations of capital and labor, industrial and agricultural development, and general social well-being, the plan being to create throughout the Dominion numerous small groups of from 10 to 15 persons, representing different phases of national activity and opinion, for the purpose of studying the problems and of making suggestions for their solution. This volume is made up of the collected opinions and suggestions of many writers in abbreviated form, arranged by the standing Committee on Plans and Propaganda, for the purpose of giving the groups some concrete material to work upon. Subjects covered are The problems of reconstruction; Demobilization, military and civil; Employment; Trade and industry; The employer; Labor; The political and industrial status of women; Industrial councils; Scientific management; Soldiers and vocational training; Education; Scientific and industrial research; Land and agriculture; Health and housing; The State in its relation to industry; Taxation and finance; Aliens and naturalization; Constitutional problems.

CLEVELAND.—*Chamber of Commerce. Committee on housing and sanitation. An investigation of housing conditions of war workers in Cleveland. Financed by the mayor's advisory war committee.* [*1918.*] *46 pp.*

This report is summarized on pages 260 to 262 of this issue of the MONTHLY LABOR REVIEW.

COHEN, JULIUS HENRY. *An American labor policy. New York, MacMillan Co., 1919. 110 pp.*

This little volume contains a succinct and impartial presentation of the best modern thought upon the industrial situation which America is facing and will have to face in the immediate future. The author in his introduction states his conviction "that the present state of industrial organization can not last, that it ought not to last; moreover, that it will not be permitted to last. Some change must come about. How shall it come about? What is the next step? How extensive is the change to be?" Admitting the leanings of his training as a lawyer, he then examines different phases of the industrial situation, giving special attention to the subjects of The philosophy of violence; The necessity for leadership and organization in industry; Morale in industry; Hiring and firing; and Individual and collective bargaining. He concludes with a consideration of "What is the next step?" He sums up his idea of an American labor policy in a platform upon which he believes that "That branch of organized labor which does not believe in the overthrow of society, but believes in the steady and orderly improvement of the conditions of labor, can join hands with organized capital. The platform contains these planks:

1. Agreements voluntarily come to between organizations of employers and organizations of workpeople shall be validated by law and shall receive support in their enforcement from all the legal agencies of Government.

2. Machinery shall be set up by which either party may secure redress in the enforcement of such agreements.

3. Free opportunity shall be accorded organized labor and organized capital to come to such agreements, and they shall be encouraged in the process by the knowledge that such agreements, when made, will be legally enforceable, and if not made the arbitrary part will be rigorously dealt with by the community.

4. Those who break their contracts will be as those who break their treaties—the enemies of organized society, to be dealt with through the combined power of the Nation.

5. Thus only can we destroy arbitrary power anywhere capable "separately, secretly, and of its single choice" to disturb the industrial peace. Thus shall we afford opportunity for the gradual ending of industrial clashes.

COLVIN, FRED H. *Labor turnover, loyalty, and output. A consideration of the trend of the times as shown by the results of war activities in the machine shops and elsewhere. First edition. New York, McGraw-Hill Book Co. (Inc.), 1919. 152 pp.*

This book endeavors to point out some of the methods by which men and women may be induced to take an interest in their work, these being based to a considerable extent upon the experience of Robert B. Wolf in his handling of paper and pulp mills under various conditions. It also takes up some of the broader problems of shop government and the relation between the employer and his employees which are being presented. Special chapters deal with Lack of interest and labor turnover; Forgetting the human element; Securing interest by instruction; Nonfinancial incentives; The employment manager; and Collective bargaining.

COMSTOCK, L. K. *Proposed system of wage adjustments. [New York, 1918]. 32 pp. 6 charts.*

A paper read before the southeastern section of the National Electric Light Association, Atlanta, Ga., June 19, 1918. The author discusses the fundamental importance of a fair method of fixing wages, and especially of adjusting them to variations in the cost of living. Such a system, he thinks, can be attained by fixing a basic wage, and varying this periodically in accordance with changes in the index price of wholesale commodities. The method of fixing a basic wage he considers rather unimportant; the main point is to start somewhere. Prevailing rates of wages in as many different localities as desired might be taken, or a base might be obtained by the method used by the United States Bureau of Labor Statistics to obtain a base for its index number, which is secured by averaging prices for the period 1900–1909. Whatever the base selected, three-fourths of it should be regarded as spent for food, clothing, and other things included among the commodities on which index figures are based; therefore, at each periodic revision, three-fourths of the basic wage should be increased or diminished by the percentage of change in the index figure since the last adjustment, the other fourth remaining unchanged.

The advantages of this method, the author points out, are that it would do away with a large number of labor disputes, taking the question of wages out of the field of controversy; that it is simple and easily understood and that its justice must appeal to employer and employee alike; that it requires no legislation and no elaborate machinery to set it in motion; and that it protects the weaker workers, while preventing the strongly organized from taking undue advantage of their strength.

The pamphlet contains a table giving index figures from 1890 to 1917, adjusted to a common base for comparison, four charts showing the course of commodity prices from 1890 to 1917, one chart showing the course of commodity prices from 1890 to 1916 according to the figures of the Bureau of Labor Statistics, and a sixth showing both the actual course of wages of the New York Electrical Workers' Union from 1900 to 1917, and what would have been their course had the plan described in the text been adopted.

COOKE, MORRIS LLEWELLYN. *An all-American basis for industry. 1109 Finance Building, Philadelphia, 1919. 16 pp.*

A reprint of a series of four articles appearing in the Philadelphia Public Ledger of April 14, 15, 16, and 17, 1919, printed in pamphlet form "in the hope that they may be of some value in the further discussion of a national industrial program." "Democracy in industry can only be reached through collective action and collective responsibility. Increased production, brought about by science and team work, justifies high wages and short hours. A steady job for every worker spells economy and efficiency."

FARBMAN, MICHAEL S. *Russia and the struggle for peace. London, George Allen and Unwin (Ltd.), 1918. 188 pp.*

Part II of this volume, which is in five parts, is devoted to the disorganization of industry and contains chapters on The economic isolation of Russia; The exhaustion of Russia; The mobilization of industry; The revolution and the exhaustion of industry; The disorganization of agriculture; and Speculation and profiteering.

FRIEDMAN, ELISHA M. *Labor and reconstruction in Europe. New York, E. P. Dutton & Co., 1919. 216 pp.*

As a guide to the United States in matters of reconstruction the author presents, largely through quotations from foreign sources, the reconstruction programs of European countries. The commissions appointed in the different countries to promote reconstruction measures are noted and the general problems of reconstruction in foreign countries outlined. Chapters III and IV deal in detail with various aspects of the labor problem in Germany and England respectively, including the programs of the labor and socialist parties, and the work of the Whitley councils. There is presented a list of commissions and committees set up in the various ministries dealing with demobilization, trade, employment, education, and other pertinent subjects, together with a summary of their duties. The volume includes a list of American, British, and French publications on reconstruction.

INTERNATIONAL HARVESTER COMPANY. *Annual report. December 31, 1918. Chicago, 1919. 24 pp.*

Sections are devoted to the industrial accident fund, pension fund, employees' savings plan, and to the employees' benefit association.

IOTEYKO, JOSEFA. *The science of labor and its organization. New York, E. P. Dutton and Co., 1919. 199 pp.*

A collection of a series of essays published in 1916 and 1917 in the Revue Philosophique, the Revue Scientifique, and the Revue Générale des Sciences, revised, to which have been added the substances of some of the author's lectures on Fatigue, delivered at the Collège de France. The leading idea running through the collection is the necessity for throwing light on certain points in industrial psycho-physiology. The book is divided into a consideration of four problems: The human motor—the question of apprenticeship, the manner of the economic working of the body, and the limits of industrial fatigue; Taylor's system; Aptitude for work of the right hand and of the left hand; and the Belgian methods of technical education.

JOURNAL OF INDUSTRIAL HYGIENE. *Vol. 1, Nos. 1 and 2. New York, The Macmillan Co., May, 1919. 140 pp.*

The first and second numbers of what promises to be a valuable addition to the current literature of industrial hygiene. The editors of the magazine are Dr. David L. Edsall, representing the United States, and Dr. A. F. Stanley Kent, representing Great Britain. The Journal presents a scientific treatment of selected subjects in special articles, followed by book reviews and a department devoted to abstracts of the literature of industrial hygiene, domestic and foreign. The articles in the first issue are on Industrial medicine and surgery—a résumé of its development and scope, by Harry E. Mock; Lead poisoning in American industry, by Alice Hamilton; The

problem of fatigue, by Reynold A. Spaeth; and Telephone operating: A study of its medical aspects with statistics of sickness disability reports, by Anna G. Richardson. Those in the second issue are on Use of Army gas masks in industries, by A. C. Fieldner and B. B. Folger; Human health and the American engineer, by George Chandler Whipple; Chip fractures of terminal phalanges, by William R. Hurley; Inorganic poisons, other than lead, in American industries, by Alice Hamilton; and Medical inspection of factory employees, by Maynard A. Austin.

KELLOGG, PAUL U. AND GLEASON, ARTHUR. *British labor and the war. Reconstructors for a new world. New York, Boni and Liveright, 1919. 504 pp.*

Characterizing the British labor movement as the "expression at a hundred points of great tidal impulses at work in the common life," the authors of this volume have pointed out international, political, and industrial features of it which they feel will fundamentally influence future social adjustments. The course of British labor is traced in all its deviations and developments during the war period.

Among the 14 appendixes, which consist of reprints of official and unofficial documents concerning labor, is a statement of labor's war aims adopted by British organizations in December, 1917, which has since become an international program for labor groups. The British Labor Party's report on "Labor and the new social order" appears in appendix IV.

From a contemplation of the whole subject, however, the authors express the opinion that "The spokesmen and programs of British labor do not voice class hatred. It shares with the government and with enlightened employers in creating constitutionalism in industry: A new spirit and a new machinery * * * A community of spirit holds British labor together. Back of its machinery of action there is a profound belief * * * in the worth of the individual. And this belief leads to a desire for founding a society where the common man will be at home."

KNOEPPEL, C. E. *The race between the high cost of living and the cost of living high. A personal talk to workers. New York, C. E. Knoeppel & Co. (Inc.), 6 East Thirty-ninth Street, 1919. 5 pp.*

KNOEPPEL, C. E., AND BERNDT, IRVING A. *Economic production plus industrial democracy: The answer to our industrial problems. New York, C. E. Knoeppel & Co. (Inc.), 6 East Thirty-ninth Street, 1919. 35 pp.*

Two papers, one on Organizing industries for economic production, by C. E. Knoeppel, and one on Industrial relations, by Irving A. Berndt, read before the National Conference of the Society of Industrial Engineers on "Industrial reconstruction problems," held in New York City, March 18–21, 1919. They are concerned largely with the purchasing power of money, the authors believing that greater production and higher wages are to form the solution to the present problem of high prices and that there is no possibility of overproduction. In the first paper, the author says: "Production creates buying power. Products are wealth. There is no limit to human desires. The only limit on ability to acquire wealth is the ability to produce it. We have only more riches by producing more goods or buying power. The quicker capital and labor get together and make goods, labor giving full equivalency and capital the highest possible wages, the quicker will be the end of the condition which makes for high prices and industrial unrest."

LABOR UNREST. *The debate in the House of Lords, February and March, 1919. London, W. H. Smith & Son, 1919. 84 pp.*

It is stated that the object of the reprinting of these debates and speeches in a condensed form is to remove, or at least to modify, the distrust both of the future and of the men given the task of shaping that future which is said to exist among the people. The foreword states that "never before, perhaps, in British industrial history have the relations between employers and employed assumed a character more challenging to national progress and social stability."

LABOR YEAR BOOK, 1919. *Issued under the auspices of the Parliamentary Committee of the Trades Union Congress, the Executive Committee of the Labor Party, the Labor Research Department, 33, Eccleston Square, SW 1., London. 463 pp. Prices: Cloth, 5s. net; paper, 3s. 6d. net; postage, 6d.*

This edition of the Yearbook deals mainly with war and post-war problems relating to labor. During the past year the attitude of labor has become more clearly defined, both toward the sort of world peace that is wanted, and toward the numerous problems that will have to be faced immediately on the conclusion of peace, so that the Yearbook is now able to give a better idea of the exact position of labor as compared with the other parties and interests in the nation than has been possible earlier. Regarding matters concerned with labor, but not connected with the issues of war or reconstruction, an introductory note refers readers to the 1916 edition of the Yearbook, which is practically unchanged, owing to the practical cessation of statistics. The data in this book are presented under the following nine general heads: The labor movement; Finance and pensions; Munitions; Military service and the defense of the realm; The state in industry; After the war; Education; Statistics; and Directories.

LASSALLE, COMMANDANT. *Droits des mobilisés et de leurs familles. Manuel pratique renfermant les dispositions militaires & civiles qui les concernent pendant la mobilisation et pour l'après-guerre. Paris, Imprimerie-Librairie Militaire Universelle, L. Fournier, 1919. 256 pp.*

A manual containing military and civil regulations concerning the rights of mobilized men and their families during the period of mobilization and during the period following the war.

MCMURTRIE, DOUGLAS C. *Experience in the reeducation of disabled soldiers in Great Britain.* [*New York, 1919.*] *40 pp.*

—— *Home teaching for shut-in crippled children. New York, A. R. Elliott Publishing Co., 1919. 7 pp. Reprinted from the New York Medical Journal for April 19, 1919.*

—— *L'œuvre d'une école Américaine de rééducation des mutilés. Paris, Imprimerie Chaix, 1919. 14 pp. Illustrated. Extrait de la Revue Interalliée pour l'étude des questions interessant les mutilés de la guerre (Janvier, 1919).*

An account of the founding and work of the Red Cross Institute for Crippled and Disabled Men in New York City, reprinted from the Interallied Review for the study of questions relating to wounded soldiers, January, 1919.

—— *The relation of earning power to award of compensation for disability incurred in military or naval service. A memorandum on the pensions practice of other nations. Prepared at the request of the Bureau of War Risk Insurance by the Red Cross Institute for Crippled and Disabled Men. New York* [*Red Cross Institute for Crippled and Disabled Men*], *1919. 14 pp.*

MANCHESTER STATISTICAL SOCIETY. *Transactions, session 1917–18, and index. Manchester (England)* [*1918*]. *170 pp.*

Papers of interest to labor are substituted labor of women, 1914–1917, by Mrs. Annot Robinson, and Capital: Its rights and responsibilities, by Sir Hugh Bell.

MODERN MEDICINE. *The application of medicine and applied sciences to industrial efficiency and national health. Vol. 1, No. 1. Chicago, The Modern Hospital Publishing Co. (Inc.), May, 1919. 152 pp.*

Significant of the increasing general interest in the subject of industrial medicine and hygiene is the appearance of the first number of this journal which is sufficiently popular in its methods to appeal to a larger class of readers than would be reached by a purely technical publication. An introductory statement regarding its purpose and scope says:

The new age in medicine—what is it? The answer is that we must think of medicine to-day as including everything that will make people fit for service. To be fit for service is to be fit to do our individual part; to be fit as a factor physically, mentally, and spiritually in a great nation's progress. It means to be fit for life. In all the history, of the world no such tremendous responsibility was ever before put upon a profession. Are the doctors prepared? Do they hear the call? Are they ready for action?

Articles of special interest are concerned with industrial clinics in women's garment trades; Prevention of tuberculosis in industry; Better housing—what it asks of the physician; and The physician's obligation to the public health. A department devoted to Medicine and industry is edited by Otto P. Geier, who says: "The profession must realize that the mobilization of man power for industrial and commercial life actually lies with itself; that we have had relatively too much science and research with too little organized application of our science to the great mass of the people upon whose health and productivity finally depends the wealth of the Nation. * * * Fortunately for industry, more fortunately for the industrial worker, happily for society and the profession, industrial medicine has taken a strong grip on the imaginations of all socially minded men. Social workers, economists, and constructive thinking minds see in this new specialty the answer to some vexing medico-social problems. It is because Modern Medicine promises to be an open forum for the frank discussion of the economic and social values in medicine that it deserves the encouragement of all forward-looking physicians."

MYERS, WILLIAM STARR. *Socialism and American ideals. Princeton, Princeton University Press, 1919. 89 pp.*

A collection of essays which appeared in the form of articles contributed to the New York Journal of Commerce and Commercial Bulletin.

NATIONAL ASSOCIATION OF CORPORATION SCHOOLS. *Committee on Continuation Schools. Report, seventh annual convention, Chicago, Ill., June 3, 4, 5, 6, 1919. Chicago, 1919. 20 pp.*

The report refers to various decisions by the Federal Board for Vocational Education, defining the provisions of the Smith-Hughes law and their practical application, under which corporation schools may participate in the distribution of the Federal appropriations through the establishment of part-time schools.

The report then considers in detail the definition of part-time schools and gives the following three types of schools or classes which come under the definition of "part time":

1. Schools or classes for those who have entered employment giving instruction in the trade or industrial pursuit in which they are employed. (Trade extension part-time schools or classes.) 2. Schools or classes for those who have entered employment and who wish to fit themselves for a trade or industrial pursuit other than that in which they are employed. (Trade preparatory part-time schools or classes.) 3. Schools or classes giving subjects to enlarge civic and vocational intelligence, i. e., to extend general education or to help in the choice of a vocation. (General continuation part-time schools or classes.)

In an appendix a letter of the chairman, thanking the Federal Board for Vocational Education for a definition of part-time schools, is quoted at length, the writer laying emphasis upon the necessity for "civic-intelligence training." He says:

In all of our vocational and technical educational endeavors this prescribed formula for civic-intelligence training has been more ornamental than useful and so narrow that little permanent good has been effected as far as guidance in solving the problems of the student's daily life is concerned after leaving school. In my daily work and contact for nearly a generation with high school and college graduates I have found this insufficiency of education due to the absence of the one or the other of the three principal coordinates of efficient vocational education: Lack of technical knowledge, arrested development of native intelligence, subnormal ethical and civic consciousness. During my long life I have always found the honest and skillful product of industry the resultant of the three coordinate factors and guiding principles: Mechanical skill, versatile intelligence, civic consciousness. In other words, the purely egotistic desires of the industrial worker must originate from and have as their basis some ethical conceptions of life and of moral and civic responsibility if our standard of civilization and of orderly government is to be maintained.

NATIONAL CHILD LABOR COMMITTEE. *The American Child, May, 1919. Volume 1, No. 1. 105 East 22d Street, New York. 72 pp.*

This quarterly publication formerly appeared as The Child Labor Bulletin. Beginning with the May, 1919, number the name has been changed to The American Child.

This name was chosen because it "seemed best to convey the present purpose of the editors—to give its readers a journal of all-round information and discussion on every subject concerning the welfare of American children of school age." Among the subjects treated in this number, of special interest in connection with labor problems, are the relation of social insurance to child welfare, health supervision of working children, legislative prohibitions of child labor, and why, when, and how children leave school.

NATIONAL INDUSTRIAL CONFERENCE BOARD. *War-time changes in the cost of living, July, 1914, to March, 1919. Boston, 15 Beacon Street, May, 1919. 31 pp. Research report No. 17.*

This is the third report issued by the National Industrial Conference Board on war-time changes in the cost of living, the other two being Research reports Nos. 9 and 14, which were noted, respectively, in the MONTHLY LABOR REVIEW for November, 1918 (pp. 328, 329), and May, 1919 (pp. 318, 319). This report shows the changes in March, 1919, as compared with July, 1914. The table following gives for each budget item the increase in the cost of living during the period noted and the increase in cost as related to the total budget. For purposes of comparison similar figures from the two preceding reports are included.

PER CENT OF INCREASE IN THE COST OF LIVING, JULY, 1914, TO MARCH, 1919, AS REPORTED BY NATIONAL INDUSTRIAL CONFERENCE BOARD.

Item.	Relative importance in family budget.	Per cent of increase in cost over 1914 at—			Per cent of increase over 1914, as related to total budget, at—		
		June, 1918.	November, 1918.	March, 1919.	June, 1918.	November, 1918.	March, 1919.
Food	43.1	62	83	75	26.7	35.8	32.3
Shelter	17.7	15	20	22	2.7	3.5	3.9
Clothing	13.2	77	93	81	10.2	12.3	10.7
Fuel and light	5.6	45	55	57	2.5	3.1	3.2
Sundries	20.4	50	55	55	10.2	11.2	11.2
Total	100.0	.....	.....	.....	52.3	65.9	61.3

NATIONAL SAFETY COUNCIL. *Safe practices, No. 23. Gas and electric welding. Chicago, 168 N. Michigan Avenue [1919]. 16 pp. Illustrated. Price, 10 cents.*

ODENCRANTZ, LOUISE C. *Italian women in industry. A study of conditions in New York City. Russell Sage Foundation, New York, 1919. 345 pp.*

A study of 1,095 wage-earning Italian women in New York, carried on from December, 1911 to June, 1913, including also a survey of the living conditions of 544 families, and a study of the weekly budgets of 147 women not living at home. The work done, the wages and earnings of the women selected for study, the conditions under which they worked and lived, their opportunities for training, and their attitude toward the work of women are dealt with in considerable detail.

OXON. *Reconstructors and reconstruction. A plea for common sense. Oxford, B. H. Blackwell, 1919. 63 pp. Price, 1s. net.*

The first part of this pamphlet is devoted largely to a discussion of theories and writers on industrial and social subjects, and the second part considers the scope of an industrial Parliament, peace by negotiation, and other plans concerned with industrial reconstruction.

RED CROSS INSTITUTE FOR CRIPPLED AND DISABLED MEN. *Publications. Series II, No. 7. Opportunities for handicapped men in the brush industry, by Charles H. Paull. Prepared by the bureau of vocational guidance, division of education, Harvard University, in cooperation with the Red Cross Institute for Crippled and Disabled Men. New York, 311 Fourth Avenue, May 1, 1919. 56 pp.*

REID, LEONARD J. *The great alternative: Saner politics or revolution. London, Longmans, Green and Co., 1918. 186 pp.*

The author has endeavored in this book to write "as a man-in-the-street for men-in-the-street, and not as an expert for experts, to indicate broad lines of solution for certain great problems in the spirit of the New Liberalism—that is of practical and far-seeing, if sweeping, reform," and in so doing, "never to lose sight of the bedrock facts of the general situation." What he means by "new liberalism" is explained to be a balancing force of moderate, but sturdily progressive, opinion. To call attention to the necessity for building up this balancing force is, he says, the first object of his book, his belief being that so far the controversy on after-war reconstruction has been practically the monopoly of specialized experts, the result being either that the discussion is too often confined to economic or philosophic theory, without real appreciation of human and mundane facts of daily life; or that problems which are essentially interdependent are dealt with as if they were in water-tight compartments. "We are," he says, "taught to study one tree from its roots to its top branches and then to flit on to another, thereby failing all the time to see the wood as a whole. My object in these pages is to glance at a few of the biggest trees, without ever losing sight of the view of the wood as a whole." Chapters deal with A new liberalism or—chaos; The premises of ordered progress; Toward the better distribution of wealth; Individual liberty and the relations of the State to industry; Industrial self-government; Profit sharing and increasing production; Cleaner politics and independent press; Land and housing; Trade policy; Education and health; Lux E Tenebris. An appendix treats of the Whitley report.

REISS, RICHARD. *The Home I Want. London, Hodder and Stoughton, xi, 175 pp.*

A summary of information concerning the housing question, legislation, architecture and town planning, and social problems of housing.

SAFETY INSTITUTE OF AMERICA. *Safety. Bulletin, May, 1919. New York, 14–18 West Twenty-fourth Street, 1919. pp. 87–112. Illustrated.*

Articles of special interest in this bulletin are entitled "A warning to locomotive crane operators," by Chester C. Rausch, and "Suitable work garments for women in industry," by Adelaide Wood Guthrie.

STODDARD, WILLIAM LEAVITT. *The shop committee. A handbook for employer and employee. New York, The Macmillan Co., 1919. 105 pp.*

The writer, who has had much experience in this particular field as an administrator for the National War Labor Board, reviews briefly the British experience, dealing particularly with the Whitley report, and also the Colorado plan which is the earliest notable example in this country of the development of a shop committee system. The National War Labor Board plan is given in detail together with accounts of the way in which it has worked out in various plants which have instituted it under the supervision of members of the board. A copy of the report on works committees, supplementary to the Whitley report, and a partial list of plants in this country in which shop committees have been organized are appended.

UNWIN, RAYMOND ED. *The nation's new houses; pictures and plans. Foreword by the president of the Local Government Board. London, "The Daily News," [1919]. 31 pp. Illustrated. Price, 6d., net.*

The plans in this booklet are taken from the report of the committee to consider questions of building construction for workingmen's houses (Cd. 9191).

WHITAKER'S ALMANACK, 1919. *Fifty-first annual issue. London, 12, Warwick Lane, 1919. 1005 pp. Price, 6s. net.*

Contains sections on Labor under war conditions, Women's work in the war, and After-war problems—the task of reconstruction, and other data relating to labor.

WING, GEORGE CLARY. *Applied profit sharing. Cleveland, Ohio, 1919.* [*Second edition*]. *15 pp.*

WOODRUFF, CLINTON ROGERS. *A new municipal program. New York, D. Appleton and Co., 1919. 392 pp. National municipal league series.*